Montgomery County, Maryland
Department of Health and Human Services
Aging and Disability Services

A Report on the Needs of Low Income Seniors Montgomery County, Maryland

June, 2002

Based Upon Survey Conducted by
Center for Health Program Development and Management (CHPDM)
University of Maryland, Baltimore County

Douglas M. Duncan, County Executive
Corinne Stevens, Acting Director

A Report on the Needs of Low Income Seniors Montgomery County, Maryland

Based Upon Survey Conducted by
Center for Health Program Development and Management (CHPDM)
University of Maryland, Baltimore County

ADVISORY COMMITTEE

Elizabeth Boehner
Director, Area Agency on Aging
Montgomery County

Miriam Brewer
Commission on Aging
Montgomery County

John Kenney
Chief, Aging and Disability Services
Health and Human Services
Montgomery County

John Park
Epidemiologist, Public Health Services
Health and Human Services
Montgomery County

Sally Roman
Research Coordinator
Research & Technology Center
Maryland-National Capital Park
and Planning Commission

Florence Rosenberg
Commission on Aging
Montgomery County

Stuart Rosenthal
Publisher
Senior Beacon

Linda Siegenthaler
Volunteer
Representing County Council member
Blair Ewing

Robert Spector
Jewish Council for the Aging

Linda Yost
Department of Recreation
Montgomery County

REPORT PREPARED BY:

Charles A. Smith
Healthcare Data Analyst
Aging and Disability Services
Montgomery County
smithcha@co.mo.md.us

TABLE OF CONTENTS

EXECUTIVE SUMMARY

This Report on the Needs of Low Income Seniors in Montgomery County examines the characteristics and service needs of low income elderly, age 75 and older. These elderly, with annual income of less than $25,000, are the group most likely to rely on publicly funded programs to provide the services needed to sustain independent living. Its findings are based upon a survey conducted for DHHS, Aging and Disability Services by the Center for Health Program Development and Management (CHPDM) at the University of Maryland, Baltimore County. Data was collected in face-to-face interviews with 304 low income elderly residents selected by random digit dialing. The survey questionnaire used was selected for its demonstrated reliability and validity.

MAJOR FINDINGS

- An estimated 16,800 low-income elderly individuals aged 75 and over, reside in Montgomery County.

- Women comprise 84 percent of the low-income elderly age 75 and older. In contrast women comprise 63 percent of all elderly age 75 and older.

- Educational attainment of low-income elderly age 75 and older is significantly lower than for all county elderly of the same age. For example, 22 percent of low-income elderly have a college degree as compared to 35 percent of all elderly age 75 and older

- African-American low-income elderly reported greater financial hardship than low-income white elderly in this study. Forty–six percent reported insufficient income to meet emergencies in comparison to 29 percent of white study participants.

- Home ownership is lower among low-income elderly. Fifty-one percent, of low-income elders age 75 and older, own their own home compared to 75 percent of all county elders age 75 and older. Thirty-three percent of low-income African-American elderly are home owners.

- Low-income elderly are four times less likely to live in married, two-person households. Thirty-nine percent of all county elders aged 75 and older live in this type of household as compared to 9.5 percent of low-income elderly.

- The number of low-income elderly in the study with a health problem increased as income decreased. For example 96% of those with an annual income under $10,000 had at least one physical health problem

- Low income women in the study reported more physical health problems. However, 60 percent of low income men reported being severely impacted by their health problems as compared to 48 percent of women.

- Limitations in performing activities of daily living in one or more areas were reported by 58 percent of low income elderly in the study. Activities of daily living are bathing, dressing, housework, preparing meals, taking medications etc. As income level declined there was an increase in the number of areas of limitation.

- Seventy-six percent of study participants who reported a problem with bathing, feeding, dressing or using the toilet received no assistance with these activities in the prior 6 months.

- Seventy-nine percent of participants who reported a limitation in an activity of daily living had not received, in the last 6 months, an evaluation of their health, mental health, social and financial status by a doctor or social worker.

- If long term care were needed, 44% of the study participants would not have anyone to provide this care.

- Men in this study were more socially isolated than women and were more likely to have unmet needs for assistance in performing activities of daily living

- Lack of transportation was associated with social isolation and mental health impairment.

UNMET NEEDS

Sixty-two percent of the low income elderly in the study had significant unmet needs in at least one area such as health, mental health, activities of daily living, access to services and social supports. This percent is an under estimate of need for three reasons: (1) interviewers could ask about only the needs identified in the survey tool; (2) due to sampling errors, Hispanic and Asian low income elderly and married women comprise less than one percent of the study population; and (3) cognitively impaired low income elderly comprised less than three percent of the study sample.

The level of unmet need for the estimated 16,800 low income elderly age 75 and older in Montgomery County is presented in the following table. The projections of need are based on the 62 percent prevalence of need found in the study population.

Estimate Number Of Low income Elderly In County With Following Unmet Need *

One or more unmet need	10,500
Help with bathing, dressing, feeding, and using toilet	4,500
Transportation	3,600
Participation in organized social activities	2,800
Help with housework	2,200
Assistance in arranging/coordinating various kinds of help	2,100
Assistive devices	2,000
Physical therapy	1,600
Food stamps	1,500
Dental care	1,250
Thorough evaluation of their overall condition	1,100
Routine checking on how they are doing	600
Assistance with meal preparation	450

* Estimates of unmet needs based on percent of total sample reporting unmet need multiplied by estimated number of low income seniors age 75 and over in Montgomery County (16,800)

Low income elderly are often a neglected population (13). They have fewer financial resources, more physical health problems, fewer social resources, are more likely to live alone and have mental health impairments to a greater extent than other elderly. Each of these characteristics is cited in the literature as being a risk factor for premature institutionalization (5,8,10,14).

Social isolation, and cultural and language barriers keep the low income elderly out of sight. When the community does see many highly educated and economically comfortable older adults, it is easy to forget that there are elderly in Montgomery County with significant needs and problems and few resources with which to address them.

In times of extended economic decline or rapidly rising inflation, poor and frail elderly are among those most adversely affected. Recessions which result in cutbacks of publicly funded services disproportionately hurt older people, people of color and people with special needs, at the lower end of the socioeconomic scale (13).

INTRODUCTION

The County contracted with the Center for Health Program Development and Management (CHPDM) at the University of Maryland, Baltimore County (UMBC) to conduct a survey of low income older individuals; defined as those with household incomes under $25,000 and age 75 or older. Based upon practice experience and an earlier study in Montgomery County, "The Status and Needs of Elder Citizens in 1986", the decision was made to focus this study on the low income population aged 75 and over, who are the most frequent recipients of publicly funded services through Health and Human Services.

METHODOLOGY

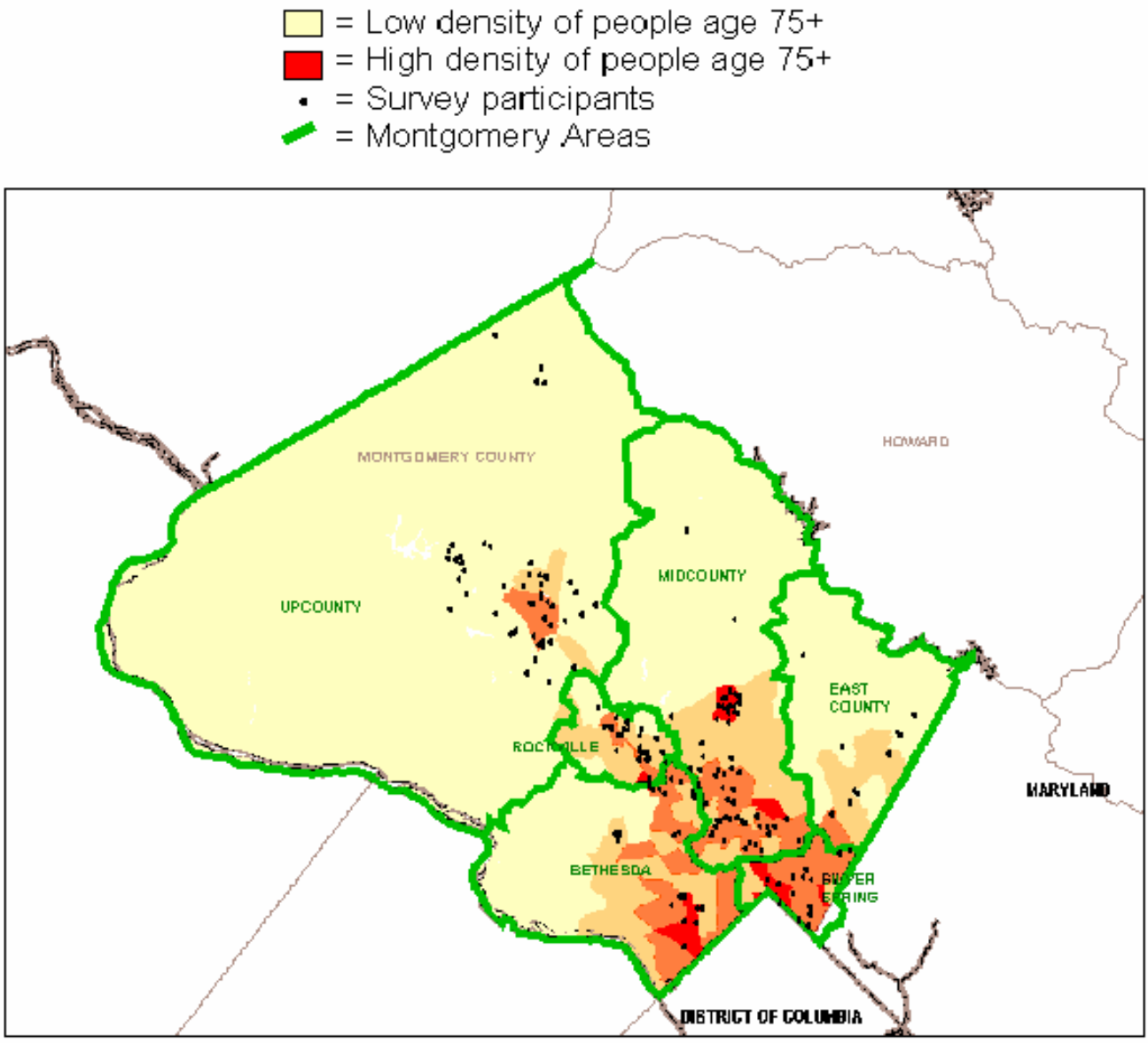
A modified version of the Older Americans Resources and Services Multi-Dimensional Functional Assessment Questionnaire (OARS/MFAQ) was used as the survey instrument because of its demonstrated reliability and validity. This report comprises preliminary data analysis completed by CHPDM along with more detailed analysis of the data and review of related published literature performed by the Department of Health and Human Services, Aging and Disabilities Services. A detailed technical manual outlining the study methodology and process is published separately.

CHPDM identified participants for this study via a phone list acquired from Survey Sampling, Inc. of Fairfield, Connecticut, that identified the target population (non-institutionalized, low income residents in Montgomery County aged 75 and over) based on published telephone numbers, driver's license information, voter registration, magazine subscriptions, and school registration lists. Approximately 3,300 calls were made to individuals on the list using a computerized random digit dialing process, and ultimately 304 individuals consented to be interviewed face-to-face by CHPDM trained staff using the OARS/MFAQ instrument.

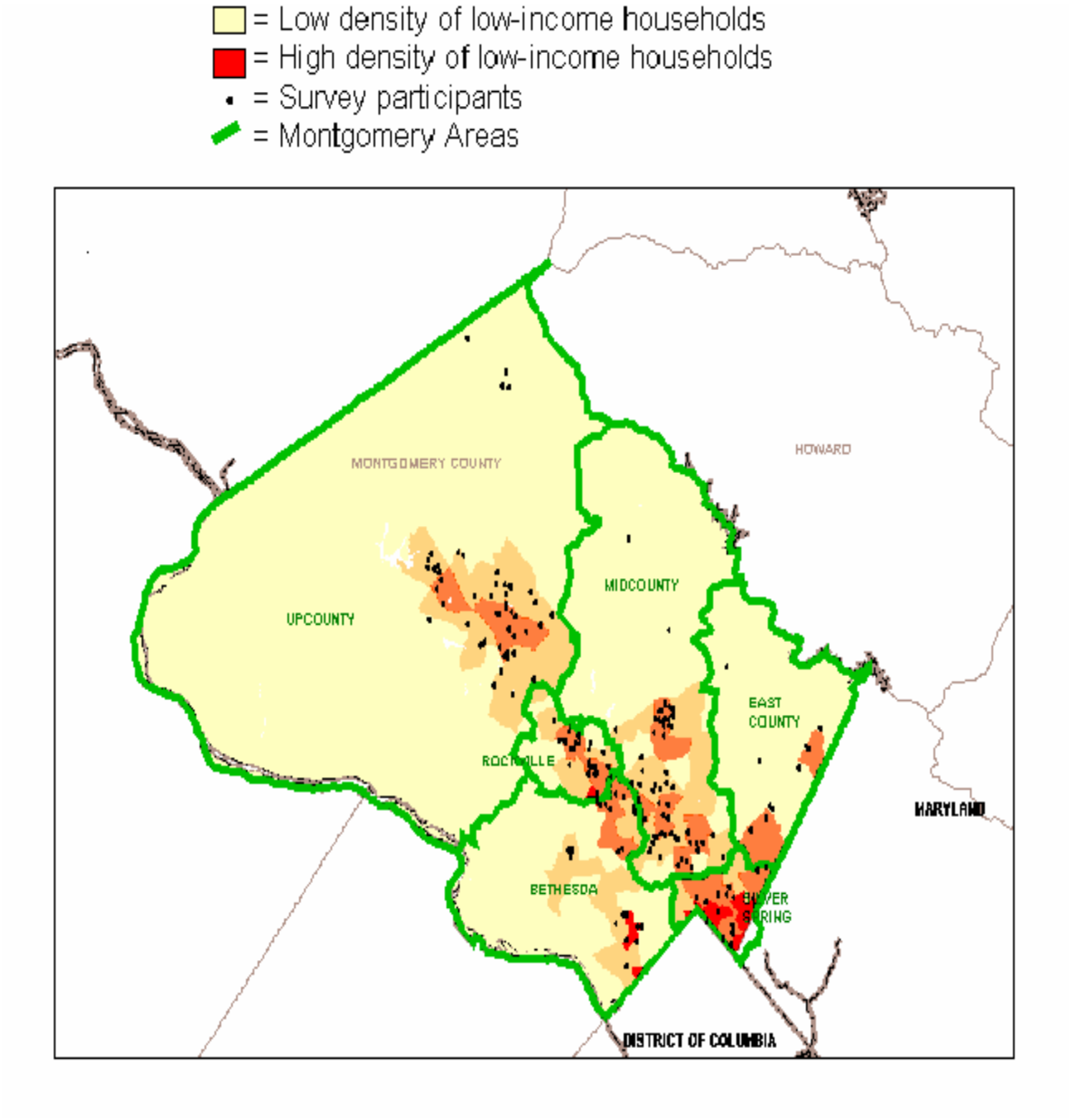
The study population is generally representative of county residents age 75 and over who have incomes less than $25,000 per year. A limitation of the sample population is that for a variety of reasons some demographic groups were significantly under represented. Asians, Hispanics, and married females each represent less than one percent of the sample population. Individuals with cognitive impairments (participants who provided four or more incorrect answers to a preliminary mini-mental status questionnaire) represented less than three percent of the study sample. National and county level data, along with a research of the literature was utilized to provide insight into characteristics of under sampled demographic groups.

The sample population included individuals from all regions of the county, with the majority of participants living in Silver Spring, Bethesda, Rockville and Germantown. The geographic distribution of participants, as illustrated in the following figures (Figure's I & II) provided by CHPDM, illustrates that participants were representative of both the distribution of all individuals age 75 and over, and of the general population (regardless of age) with household incomes of $25,000 and less.

I. Figure I: Geographic Distribution of Participants Compared to General Population 75 Years and Older in Montgomery County



II. Figure II: Geographic Distribution of Participants Compared to General Population with Incomes $25,000 and Less in Montgomery County



I. DEMOGRAPHICS

In general the study found that the low income elderly population in the county is female (84 percent), white (88 percent), and unmarried (90 percent). The low income elderly participants in the study differ from the general population age 75 and over in that they are more heavily female, almost 4 times more likely to be unmarried, and have a lower level of educational attainment.

AGE

The elder population, and in particular those age 75 and over are the fastest growing segment of the population. United States Census data shows that between 1990 and 2000 the population of individuals age 65 and over in Montgomery County increased by 27 percent, and those age 75 and over increased by 54 percent. (9) 2000 US Census data shows that 11 percent of the county population is age 65 and over, and will continue to increase over the next couple of decades as the "baby boom" generation ages. Projections are that by 2030 as much as 20 percent of the population will be age 65+ (1). Of particular concern will be growth in the population of those aged 85 and over who are the fastest growing segment of the population. Projections indicate that over the next 15 years, those age 85 and over are expected to increase over four times faster than the population aged 65 to 84 (15). Seventy-one percent of the study participants were age 75-84, and 29 percent were age 85 or older. This ratio is consistent with the county elder population in general, whose ratio of those age 75-84 versus those age 85 and over is 73 percent versus 27 percent (1). Additionally, national projections are that the Asian and Hispanic elderly population will increase by over 300 percent in the next 30 years (1).

Table 1:
Projected Population of People 65+ in Montgomery County, 2000-2030

	2000	2005	2010	2015	2020	2025	2030
Population 65 years and older	98,157	106,090	118,460	138,540	162,430	189,500	215,090
Percent of total County population	11%	11%	12%	14%	16%	18%	20%

Maryland Department of Planning, Planing and Data Services, September 2001

The number of low income individuals age 75 and over in the county is approximately 16,800. Exact Census data is not available on the income range utilized in this study; however, estimates can be made using reasonable assumptions (9). Table 2 outlines the estimates of total low income elders in County based upon published census data and assumptions that county households with incomes between $20,000 and 25,000 are almost half again as many as the total number of households under $20,000 (9), and that while average household size for all individuals aged 75 and over is 1.5 that low income individuals are much more likely to live alone (1, 3).

Table 2:
County Population Age 75+ With Income Under $25,000

Total population age 75+	48,064
Population age 75-84	35,081
Population age 85+	12,983
Households with income below $20K	8,445
Estimated households below $25K [1]	12,200
Average size of households with head 75+	1.5
Average size of low income households with head 75+ in study	1.25
Estimated population 75+ with household incomes under $25K [2]	15,250 – 18,975

1. Estimate of household number based on Maryland State Data Center statistics that shows that elder households with incomes $20-25,000 are 44.4 percent of those under $20,000.
2. Upper and lower bounds based upon different average household size with estimated population being midpoint of range.

GENDER

The study indicates that being female, in and of itself, increases the risk of being poor among individuals age 75 and over. In the study population of low income elders, 84 percent of the participants were female. This is significantly higher than national and local percentages for women aged 75 and over across all income levels (Table 3). Previous studies have found that approximately two-thirds of elderly households with incomes under $20,000 were female headed, which is attributed to a variety of factors, including: Reduced years in workforce as a result of child rearing, reduced pension levels after death of spouse, and reduced asset income due to having to finance medical and long-term care expenses for ill husbands (2). It should be noted that though the study was comprised of 84 percent females, the manner in which the sample was drawn resulted in all married individuals in the 75-84 age group being male head of households. Consequently, the true percentage of females in the low income bracket as captured by this study was closer to 88 percent when a correction is made for the sampling design.

Table 3:
Women Make Up Largest Portion of Low income Population

	Low income Women 75+ in Study	Women 75+ in County (all income levels)	Women 75+ Nationally (all income levels)
75-84	84%	59%	61%
85+	83%	68%	71%
All 75+	84%	63%	63%

MARITAL STATUS

Low income elders in the study were much less likely to be married, a factor that puts them at increased risk for institutionalization (11). Table 4 shows that among study participants, the number of those age 75-84 that were living in married households was 6 times lower than the overall county average for that age group, and the number of those age 85+ was almost 2 times lower. The significantly lower percentage of married individuals among the low income population is related to several factors: Widowed females, who constitute a majority of the sample, have lower income levels on average, and male widowers with low incomes are more likely to remain unmarried (54 percent of the low income males in the sample were married compared to 69 percent of men in this age group nationally) (1). The importance of marital status is underscored by studies that have shown that an individual's emotional and economic well-being, along with their ability to maintain independent living in the event of an illness or disability, is influenced positively by marriage and the availability of a caregiver (11). Particularly among males, living with a spouse is a primary contributor to independent living (15).

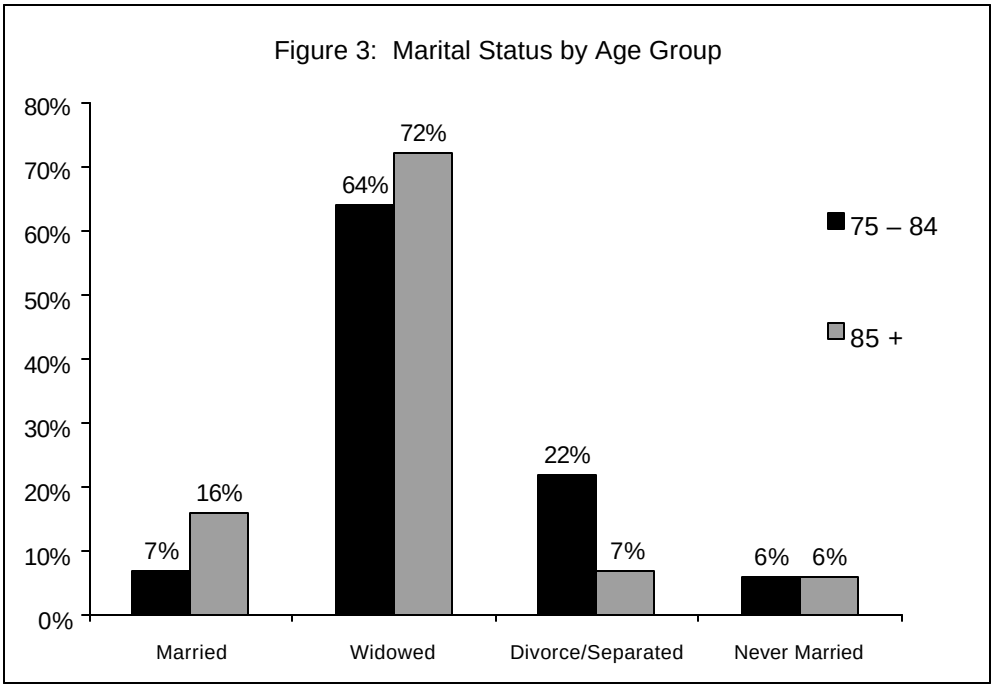
Table 4:
Low income Elders Are Less Likely To Be Married
(percent reporting being married)

Age Group	Low income Population in Study	County (all income levels)	National (all income levels)
75 - 84	7%	44%	50%
85 +	16%	27%	26%
All	10%	39%	43%

As mentioned in the introduction, a limitation of this study was that the sample contained no married women in the 75-84 age group. This limitation was apparently a by-product of the sampling design which selected participants primarily by name appearing on the telephone bill. All of the married couples in that age group in the study population had the husband's name on the phone bill, and consequently all married participants were male. As a result of this sampling limitation, comparisons of marital status of men versus women are not appropriate. When examined across both genders, Whites and African-Americans did not show any statistically significant differences in terms of marital status.

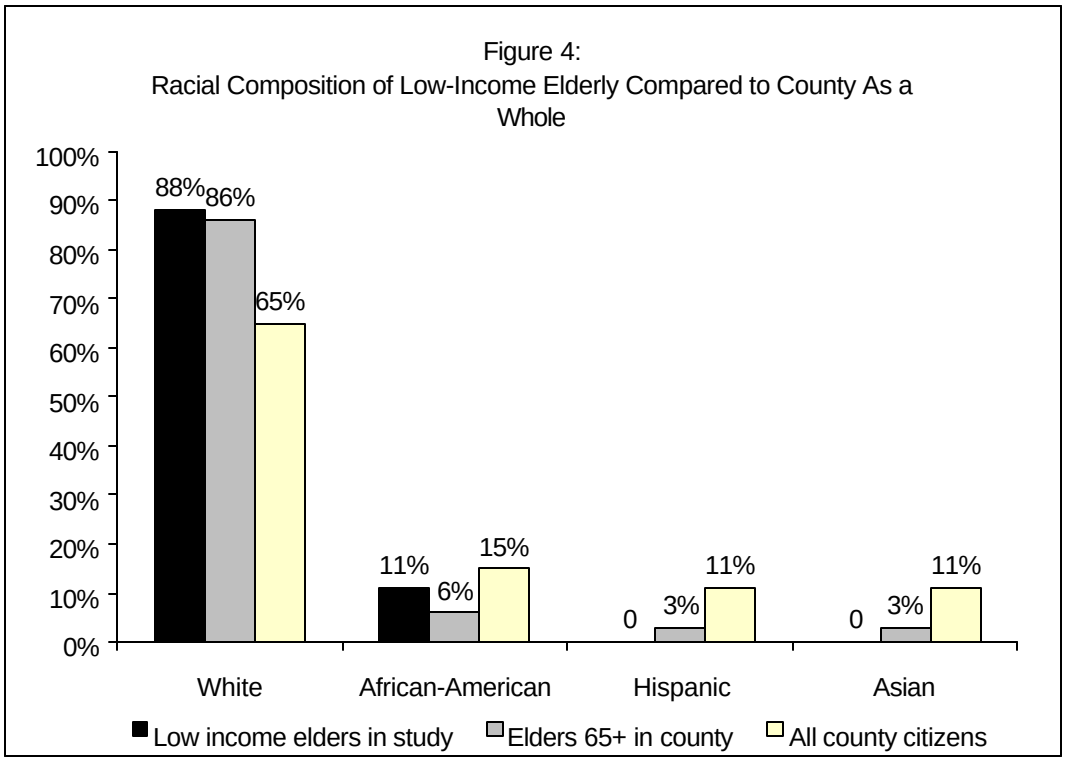
Table 5:
Marital Status By Age Group

Age Group	Married	Widowed	Divorced/Separated	Never Married
75 – 84	7%	64%	22%	6%
85 +	16%	72%	7%	6%
All 75+	10%	66%	19%	5%



MINORITY

The elderly population in the county is less diverse than the general population, though projections are that the Asian and Hispanic elderly population will increase by over 300% in the next 30 years (1). The lower level of diversity in the elder population is related to the fact that the average age of individuals in foreign-born households is lower than that of the general population, with the vast majority of recent imigrants being non-elderly. African-Americans were over represented in the sample population, with 11 percent of the participants being African-American compared to the overall county percentage of 6 percent. As mentioned in the introduction, a limitation of this study was that the sample included less than 1 percent Asian and Hispanic individuals.



EDUCATION

Educational attainment of low income elderly study participants was above national averages, but substantially lower than comparable figures for county residents as a whole. Educational attainment is a predictor of income level, thus it is consistent to find that this sample of low income individuals has lower educational attainment than the comparable county age group including both low and non low income elders. Women were more likely to have a high school degree, but less likely to have education beyond high school. Twenty-two percent of participants had a college degree, which is 13 percentage points lower than that of the county elder population as a whole (35 percent of county residents age 75 or over have a college degree (9)).

Table 6:
Low income Population Has Lower Educational Attainment

	Low income Population in Study	County 75+ (All income levels)
Less than High School Degree	18%	21%
High School Degree	60%[1]	44%
College Degree	10%	20%
Graduate Degree	12%	15%

[1] Percent of study population with high school degree is inflated compared to county average due to lower numbers of participants with degrees beyond high school.

Notable is the finding that 18 percent of the low income elderly did not have a high school degree, and 39 percent of non-white participants were without a high school degree. Both of these figures are significantly lower than national averages for those aged 75 and over, and are likely related to the low income status of these individuals. Participants with less than a high school degree had significantly lower total income levels, with 76 percent having a household income of less than $15,000 per year compared to 41 percent for the sample as whole. Those with less than a high school degree were rated as having double the level of "moderate" to "severe" impairment in social resources. The lower level of financial and social resources places this group of individuals at heightened risk in the event of illness or disability.

African-American participants in the study were over three times more likely to have a college degree than African-Americans nationally age 65 and over. Twenty–seven percent of the African-Americans in this low income sample had a college degree, compared to national statistics which show that only 7 percent of African-Americans age 65 and over have attained that level of education (11).

Table 7:
African-Americans in Study Had Higher Educational Attainment Than National Averages

	African-Americans 75+ in Study	African-Americans 65+ Nationally
Less than High School Degree	40%	37%
High School Degree	33%	56%
College Degree	27%	7%

II. ECONOMIC RESOURCES

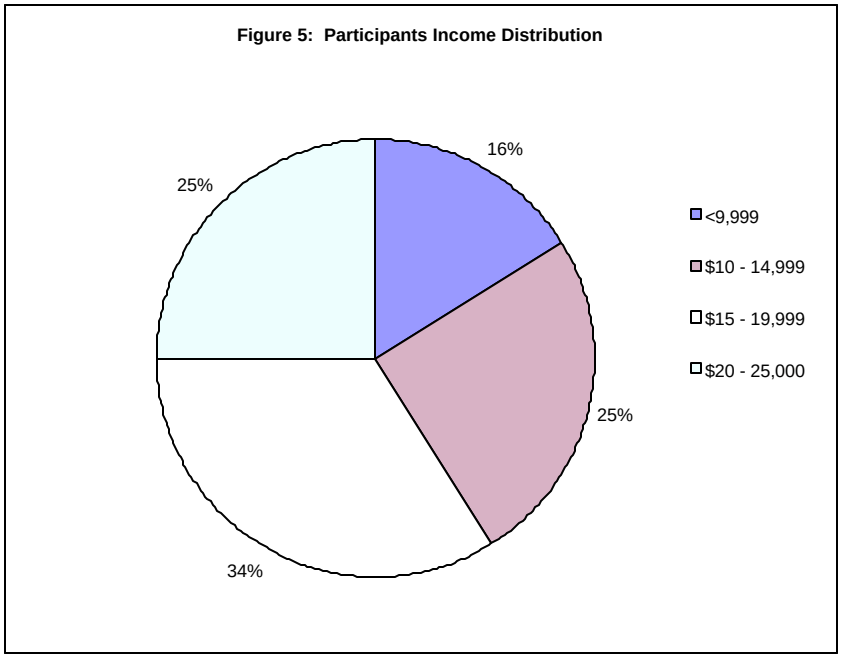
Poor elderly people often exist as an almost invisible disenfranchised population, particularly within the context of generally held current belief that society has provided for them (13). A pervasive belief exists that in general the elderly are basically financially secure and exempt from economic hardship (13). However, while many of them no longer have mortgages or expenses related to child rearing, their incomes are limited and often they do not possess sufficient reserves to meet emergencies. Complicating the picture is the fact that the elderly themselves often underestimate the costs associated with medical care, and for a combination of reasons consistently overestimate their financial well-being on self-report measures.

INCOME

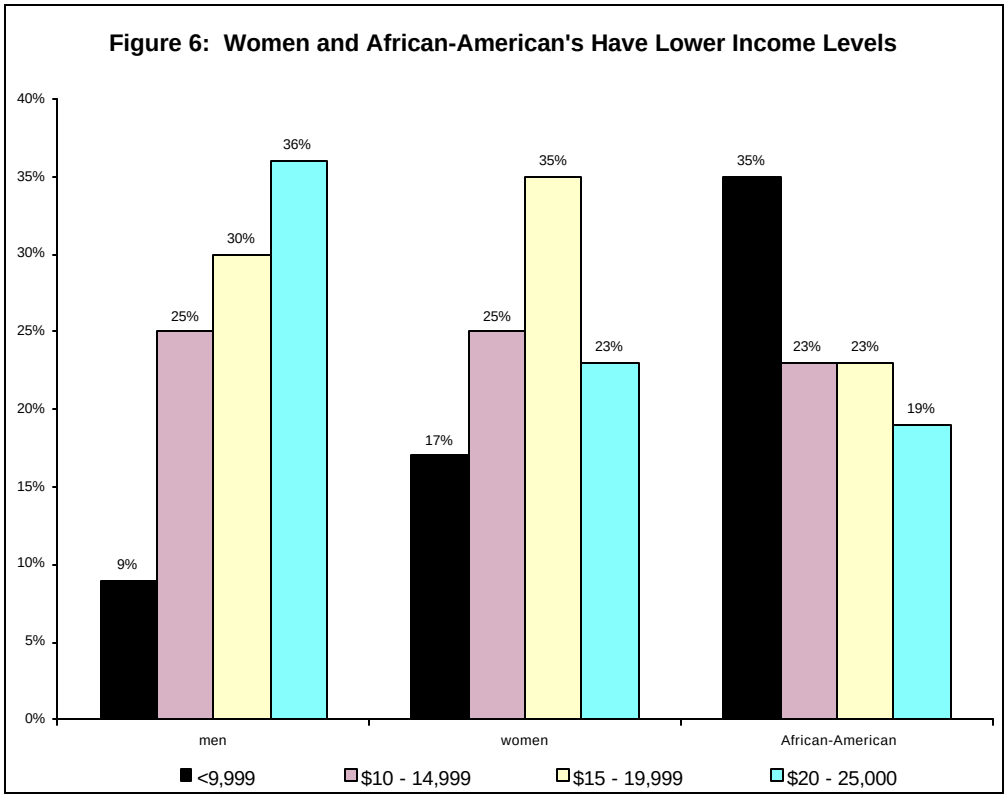
Census data shows that household income declines substantially with age (9). Whereas the median income in 1996 for all county households age 65 and over was $50,526, this figure drops to $46,628 for those aged 75-84, and then to $33,475 for those aged 85 and over. This study in particular examined those with incomes under $25,000, which represents approximately 35 percent of the County elderly population or about 16,800 individuals (see Table 1).

Table 8: Household Income Declines With Increasing Age (1996 Median Household Income)

All County Household (all ages)	$65,840
All Elderly Households (65+)	$50,526
Head of Household age 75-84	$46,628
Head of Household age 85+	$33,475



Forty-one percent of the participants that agreed to disclose household income stated that their income was less than $15,000 per year. Eight percent of participants refused to give any income information beyond eligibility for the study. Women were more likely to have lower incomes, with 42 percent reporting incomes under $15,000 compared to 34 percent for men. African-Americans were even more likely to report lower incomes, with 58 percent reporting incomes under $15,000 compared to 39 percent for Whites. All of the respondents who reported incomes below $10,000 per year were women.



The major sources of income for the participants in the study were Social Security benefits, public and private pensions, and rental and investment income. The percentage reporting Social Security and Pensions was higher than national averages, however the percentage reporting rental and investment income was 16 percentage points lower, indicating that the low income elderly had fewer assets to supplement their incomes. Four percent of the participants indicated that they work part-time. Financial assistance from families was more likely to be reported by those aged 85 and older (13 percent) compared to 6 percent of those age 75-84.

Table 9:
Major Sources Of Income

Social Security Benefits	95%
Public and Private Pension	50%
Rental and Investment Income	46%
Financial Assistance from Family	8%
Supplemental Security Income (SSI)	4%
Veterans Administration Benefits	2%
Disability Payments	2%
Alimony	2%
Public Assistance	2%
Churches/Private Organizations	1%

Fourteen percent of the participants have Social Security as their sole source of income. African-Americans were twice as likely to have Social Security as their sole source of income (22 percent compared to 11 percent for Whites). Those with only Social Security had lower incomes (78 percent had incomes below $15,000, compared to 41 percent for the entire sample), were less likely to live alone (67 percent lived alone compared to 75 percent for the entire sample), and had significantly lower levels of educational attainment (43 percent did not have a high school diploma compared to 18 percent for the entire sample).

ADEQUACY OF INCOME

As would be expected, individuals with lower income reported greater difficulty meeting basic financial needs (Figure 7). While there is no significant difference based on gender or age category (75-84 versus 85+), there are differences based on race, marital status, and whether an individual is a homeowner.

Twenty-four percent of study participants reported financial difficulty in paying for medications (Figure 7). As would be anticipated, as income declined the percent of those reporting difficulty paying for medications increased (34 percent of those with incomes under $10,000 compared to 17 percent of those with incomes between $20-25,000). **Projected over the County as a whole, in excess of 4,000 low income elders over age 75 experience difficulty paying for medications.**

African-Americans reported statistically significantly more financial hardship than Whites. They are 17 percentage points more likely to report their income is insufficient to meet emergencies, 11 percentage points more likely to report an inability to buy little extras, and 10 percentage points more likely to not have enough for future needs and to have difficulty paying for medications.

Figure 7: Lower Income Results in Greater Difficulty Meeting Basic Needs

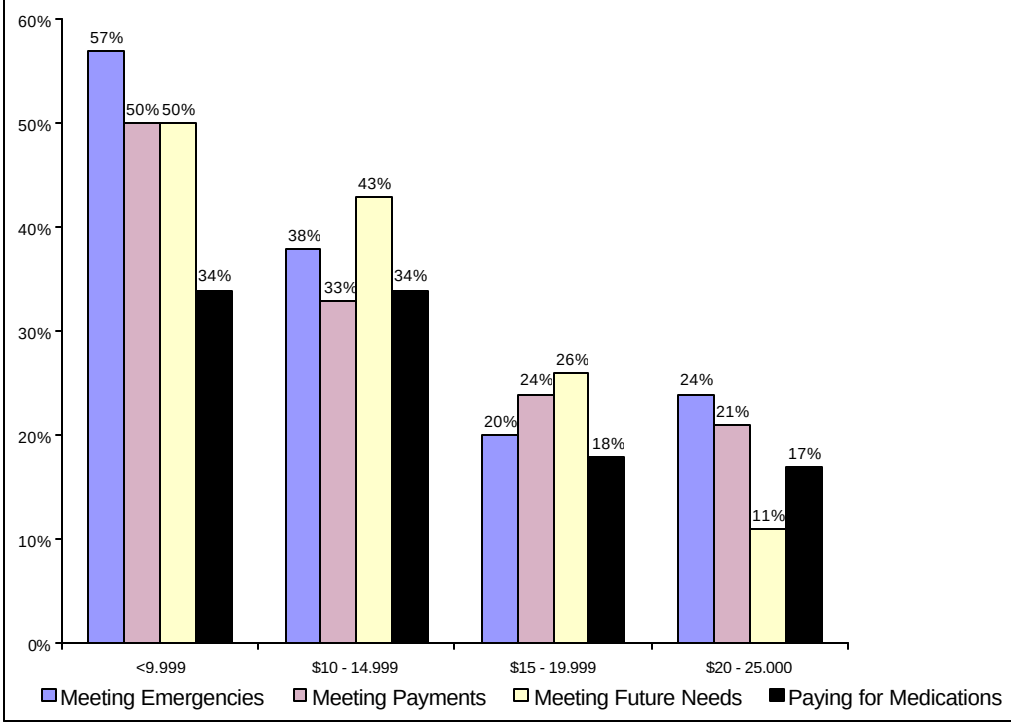
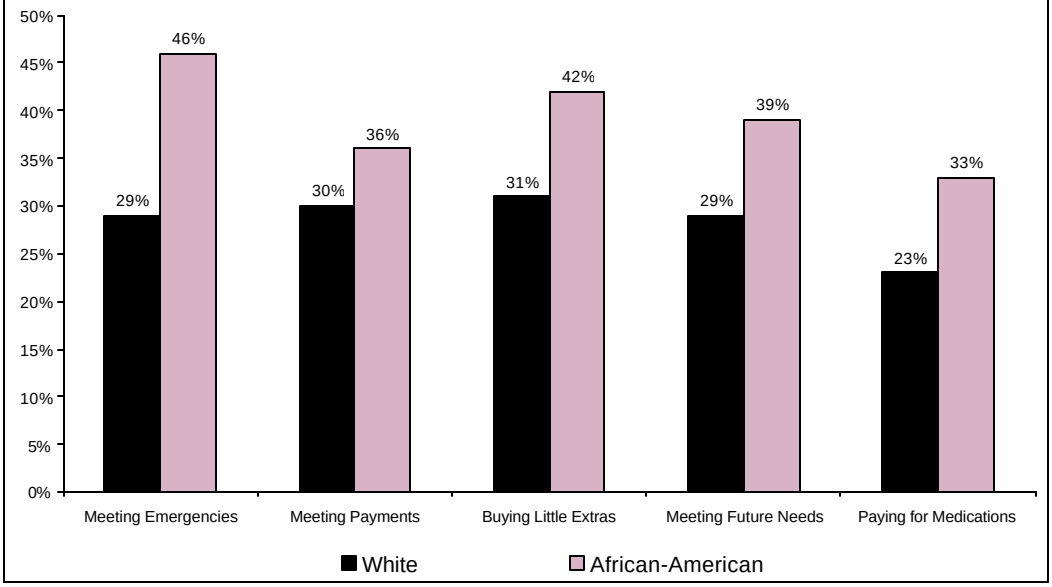
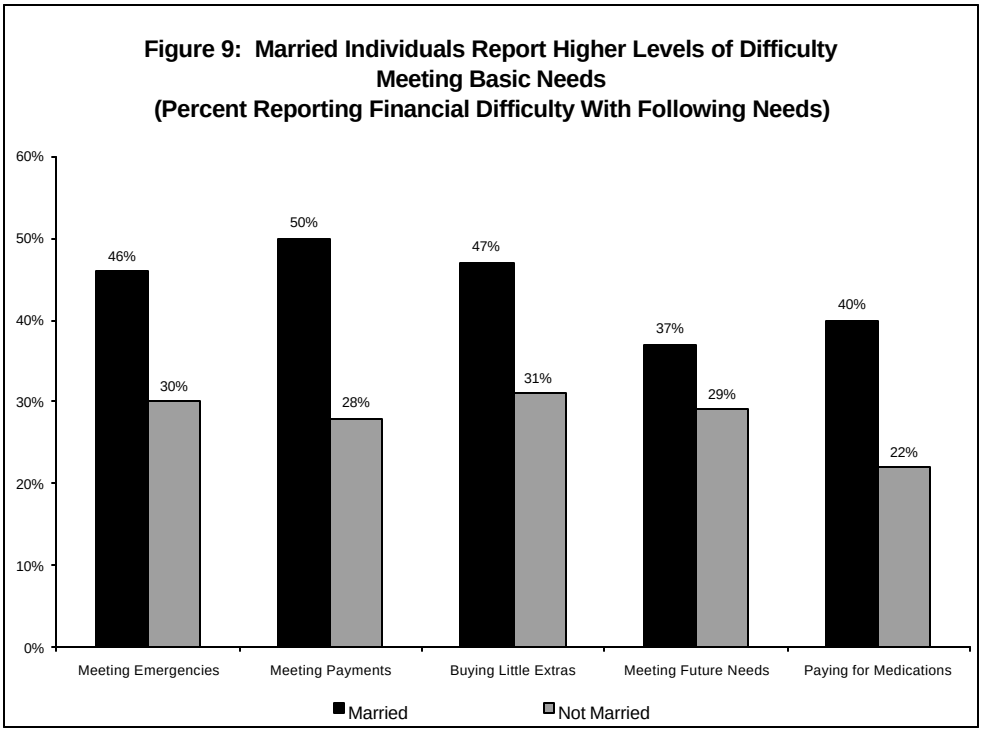


Figure 8: African-American's Report Higher Levels of Difficulty Meeting Basic Needs

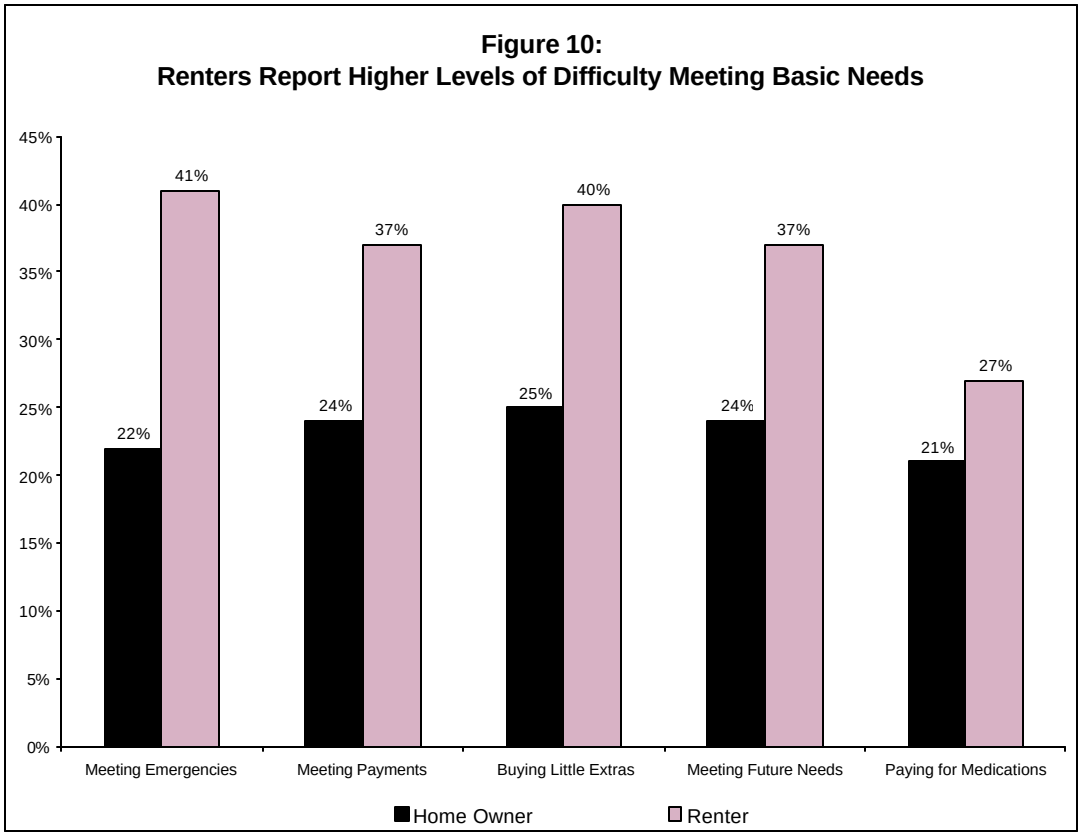


Married participants, where income supports two people, reported significantly more financial hardship than the group as a whole. They are 20 percentage points more likely to report difficulty meeting payments, 16 percentage points more likely to have difficulty paying for medications, 15 percentage points more likely to report both not having enough for emergencies and not being able to buy little extras, and 7 percentage points more likely to not have enough for future needs.

Figure 9: Married Individuals Report Higher Levels of Difficulty Meeting Basic Needs (Percent Reporting Financial Difficulty With Following Needs)



Non-homeowners reported significantly more financial hardship than those who own their own home. They are 19 percentage points more likely to report that their income is insufficient to meet emergencies, 16 percentage points more likely to report an inability to buy little extras, 13 percentage points more likely to not be able to make payments, 12 percentage points more likely to feel insufficient resources for future needs, and 6 percentage points more likely to not be able to afford medications.



Even though this generation is often hesitant to request financial assistance, it is notable that the study implies as many as 1,500 low income elders feel that they need Food Stamps and are not receiving them. The study showed that 13 percent of the participants reported a need for Food Stamps, including 67 percent of those with income under $7,000. However, two-thirds of the individuals who stated that they felt a need for Food Stamps (representing 9 percent of entire sample) were not receiving them. Extrapolated over the estimated total low income elderly population over age 75 of 16,800, there is an implied **unmet need for Food Stamps of almost 1,500 individuals**.

Dental care was another area in which study participants reported not getting proper medical care due to lack of money. Eight percent of sample participants stated that they had not seen a dentist in the prior year due to insufficient financial resources. Extrapolated over the total estimated low income elderly population of the county, **approximately 1,250 low income seniors over age 75 have an unmet dental need due to insufficient income**. The significance of this is that oral health is an important and often overlooked component of an older person's overall health and well-being. Oral health problems may hinder a person's ability to be free of pain and discomfort, to maintain proper nutrition, and to enjoy interpersonal relationships and a positive self-image (6).

MEDICAL INSURANCE

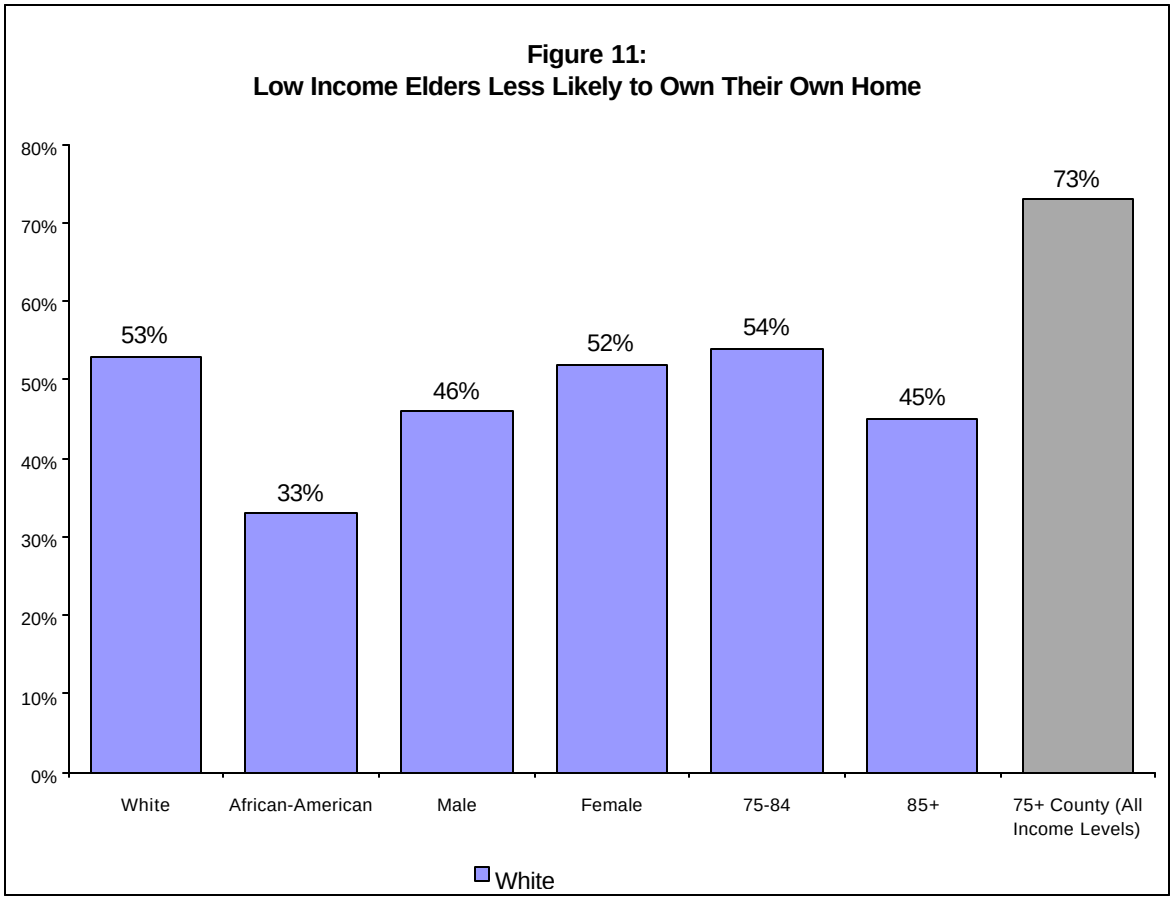
The vast majority of participants report having medical coverage. Ninety-nine percent reported having some form of health insurance, 97 percent had some form of Medicare, and 81 percent had Medicare plus an additional form of health insurance. While the numbers were too small to be statistically significant, it is worthwhile to note that 9 percent of those with incomes under $10,000 did not have Medicare. This suggests that those at most risk of not obtaining health care due to insufficient income are also those at the highest risk of not having Medicare coverage.

III. HOUSING

HOME OWNERSHIP

Low income elders are less likely to own their own homes, which represents a significant asset to offset potential costs associated with illness or disability. Slightly more than half the participants (51 percent) in the study report they own their home, which is 22 percentage points lower than the figure for all county households headed by an individual age 75 or older. Home ownership is significantly related to income with only 27 percent of those with incomes under $10,000 reporting they own a home compared to 66 percent of those with incomes between $20-25,000. Seventy-two percent of homeowners report owning their home outright, which translates into 37 percent of the entire sample. In comparison, national data indicates that more than half of all individuals over age 75 own their home outright.

Figure 11:
Low Income Elders Less Likely to Own Their Own Home



Among homeowners, those who are 75-84 years old are twice as likely (31 percent versus 15 percent) as those 85 and over to be still paying a mortgage. Of those paying mortgages, 48 percent have a mortgage of $500 or more per month and 14 percent have a mortgage of $750 or more per month.

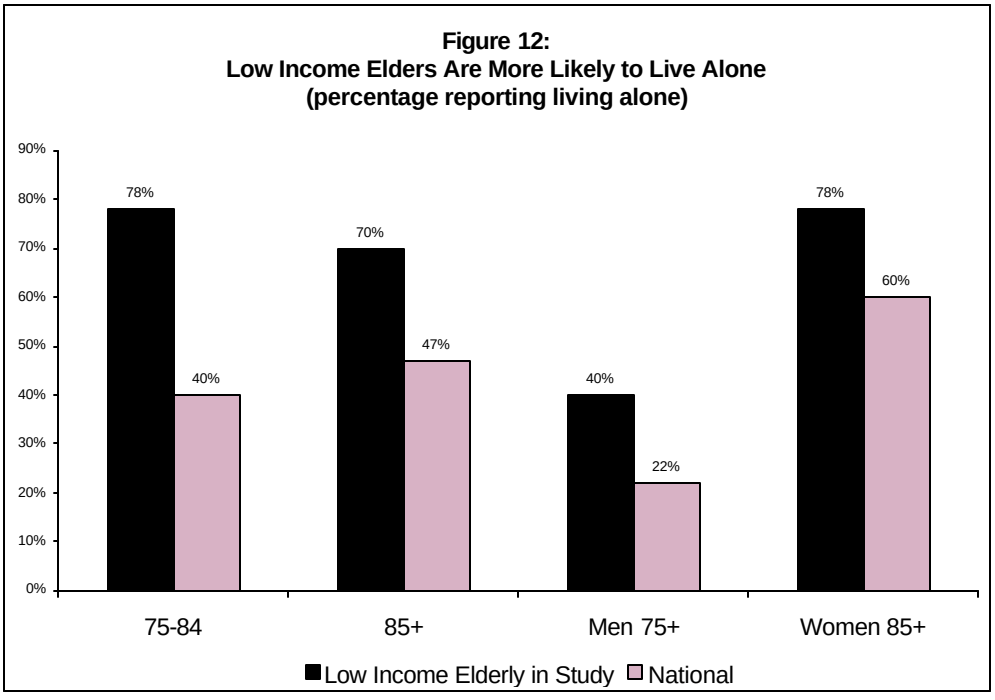
Forty-nine percent of the participants rent or share a home, and 95 percent of these individuals pay some form of rent. Almost half of those paying rent are paying $500 or more per month and 31 percent pay $750 or more per month in rent. Fifty-two percent of renters do not receive either a rent subsidy or assistance paying rent from another party.

The vast majority of individuals (99 percent) state that they have a decent place to live. Eight percent of the participants stated that even though they had a decent place to live they needed to find another place to live. Of those indicating they need a new place to live 44 percent sited the cost of housing as the reason, 40 percent cited the need for more supportive services, and 24 percent cited a need to be closer to services.

LIVING SITUATION

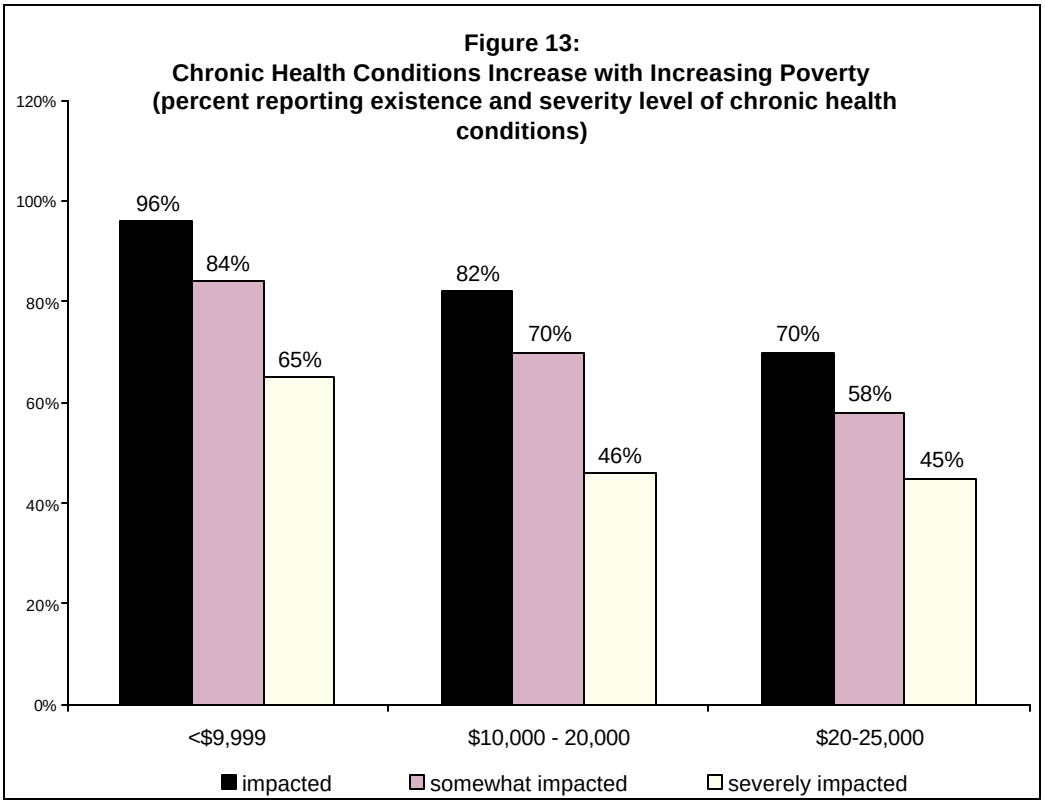
"Living arrangements are important because they are closely linked to income, health status, and the availability of caregivers. Older persons who live alone are more likely to be in poverty than older persons who live with their spouses" (3). In the study 75 percent of participants reported living alone, and the average family size was 1.25 persons per household. Both of these figures are substantially lower than comparative values for this overall age group in the county. In the county as a whole, the average household size where the head of household is age 75 or over is 1.5, and more than 39 percent live in married two person households. **Whites are more likely to live alone (77 percent) compared to African-Americans (61 percent**).

Figure 12:
Low Income Elders Are More Likely to Live Alone
(percentage reporting living alone)

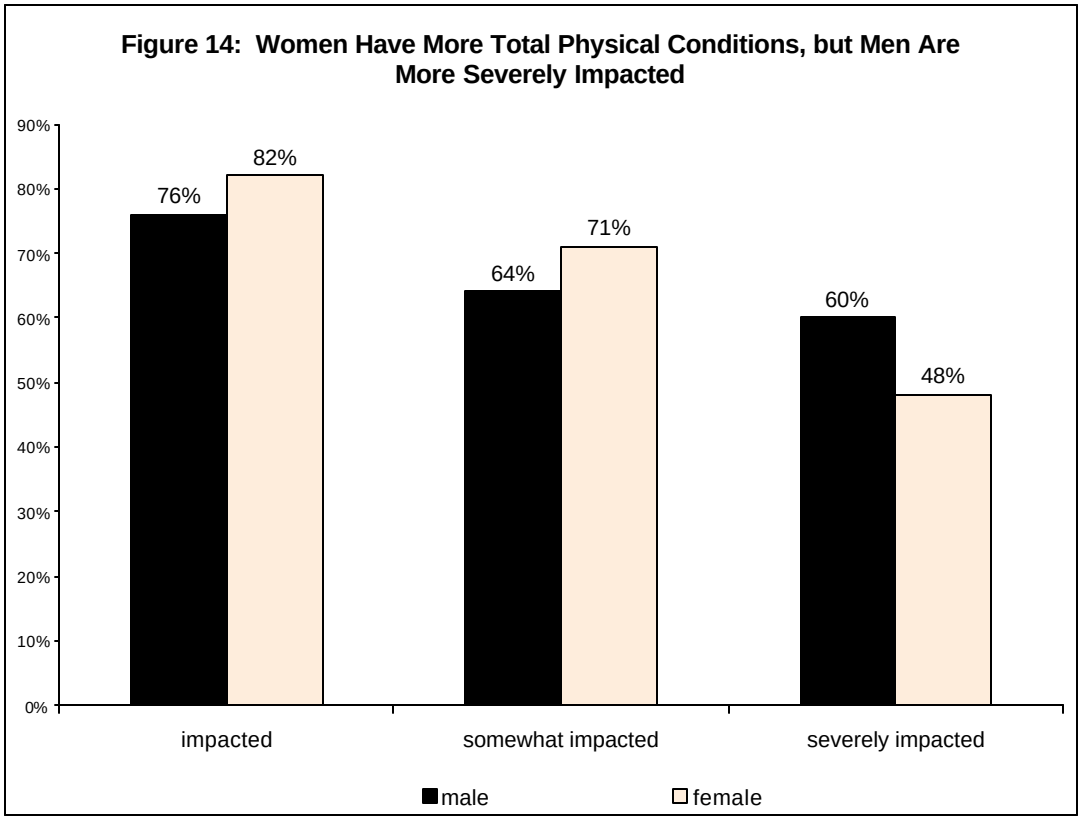


IV. PHYSICAL HEALTH

Individuals with the lowest income have the greatest number and the most severe degree of chronic physical health conditions. Chronic conditions, such as arthritis, heart disease, diabetes, respiratory diseases, and strokes, have a significant impact on the quality of life of individuals, their ability to remain independent in the community, and contribute to economic burdens on families and local and national government (6). The correlation between low income status and increased incidence of chronic physical health conditions is attributed in part to the fact that low income elders are less likely to visit physicians or receive preventive health care (16). As illustrated in Figure 13, 96 percent of those with incomes under $10,000 reported at least one chronic health condition of any severity, 84 percent reported having at least one chronic condition that affects them somewhat, and 65 percent reported one condition that severely impacted them or a combination of three or more conditions that impact them somewhat.



Women have a higher incidence of chronic physical conditions, but men report higher levels of being severely impacted. Figure 14 shows that while women were 6 percentage points more likely to report one or more chronic physical condition, men were 12 percentage points more likely to report that they had a chronic condition that severely impacted their activities. This finding is consistent with prior studies that have shown that elderly women have higher incidences of arthritis and hypertension, but elderly men are more likely to have heart disease, diabetes, respiratory problems, strokes and cancer (6).



Low income participants in the study reported higher levels of arthritis, hypertension, heart trouble and diabetes than national averages for this age group, but lower rates of cancer and stroke (Table 9). The higher rates of illnesses are related to the fact that individuals with lower incomes are less likely to receive preventive health care, or more likely to to delay visiting a physician until the condition has become advanced. Of note is that while other chronic illnesses are higher than normal, cancer and stroke rates are lower than national percentages, raising the question as to whether lack of resources might result in individuals with cancer or stroke no longer being able to remain independent in the community either due to institutionalization or mortality.

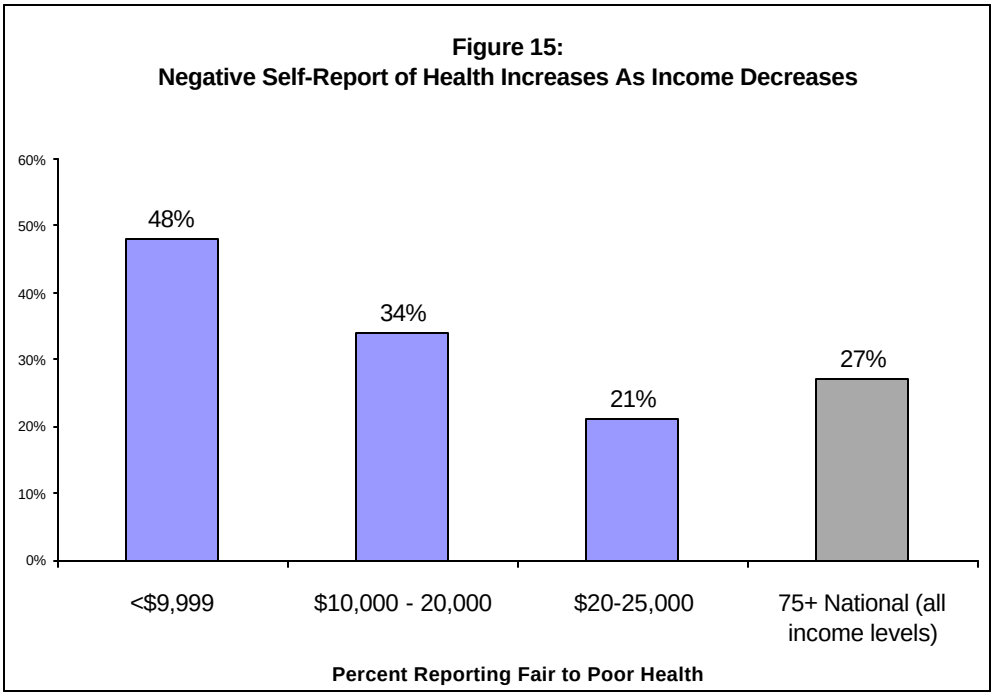
Table 10:
Percentages Of Participants Reporting Physical Health Conditions

	With Condition At All		Impact Somewhat	Impact Deeply	Est. # Impacted Deeply in County [1]
	Study	National[2]			
Arthritis	67%	59%	56%	19%	3250
Hypertension	59%	45%	22%	3%	500
Heart Trouble	36%	22%	24%	6%	1000
Diabetes	18%	12%	9%	3%	500
Cancer	11%	20%	4%	2%	350
Stroke	6%	9%	5%	2%	350
Emphysema	12%	n/a	9%	6%	1000
All Conditions	83%	n/a	69%	50%[3]	8650

1 Estimated number of low income elders aged 75+ with condition based on study
2 Older Americans 2000: Key Indicators
3 Participant reports 1 or more conditions that severely impact or 3 or more conditions that somewhat impact

Thirty-five percent of low income elders in Montgomery County are at increased risk for decline in physical functioning, independent of the severity of other medical conditions. Prior studies have indicated that for matters of health, the perceptions of the elderly themselves may be better than those of professional staff (16). It has also been found that elderly persons who report their health as "poor" are at increased risk for deterioration in physical functioning, separate and apart from the severity of existing medical conditions (6). Of significance is that 35 percent of low income participants rated their health as "fair" or "poor", compared to 27 percent of all older adults in this age group nationally (1).

Individuals with the lowest income are at the most risk for declines in physical functioning, independent of the severity of other medical conditions. Forty-eight percent of participants with incomes under $10,000 reported "poor" or "fair" health compared to 21 percent for those with incomes between $20 – 25,000. This is consistent with the Medicare Health Outcomes Survey (1999) which found that women with incomes of less than $10,000 were more than twice as likely to report fair to poor health compared with women whose incomes were more than $50,000 (40 percent versus 15 percent).



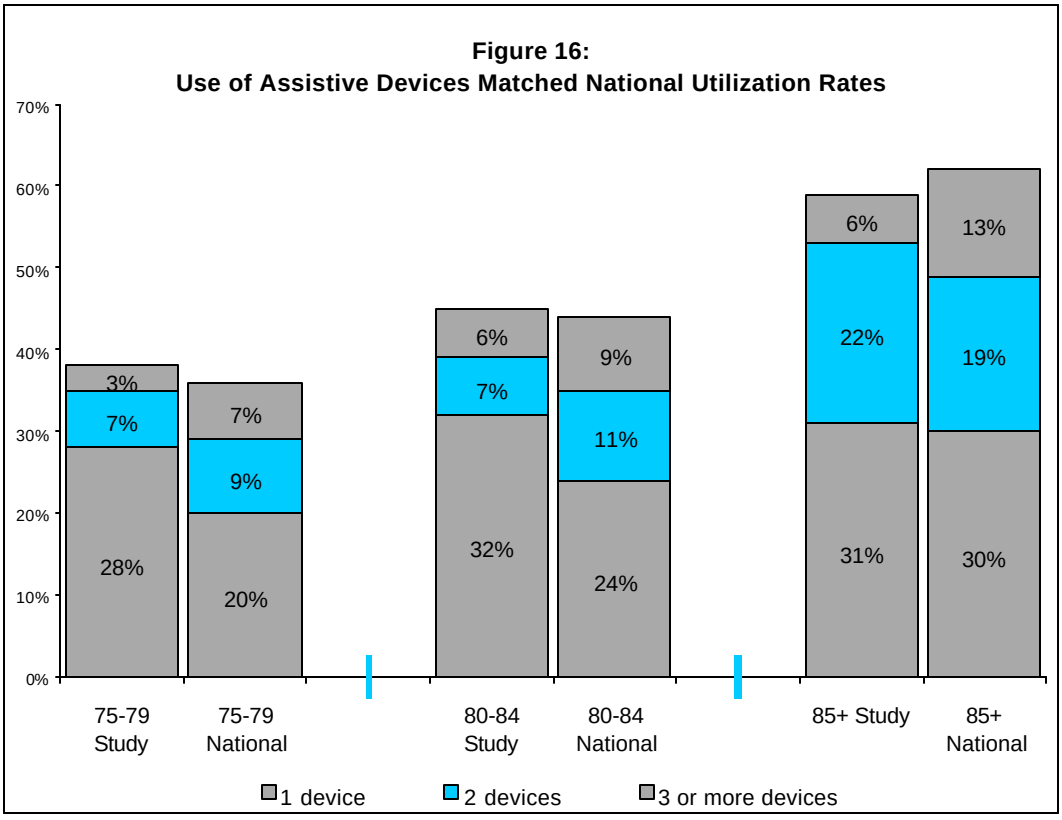
Individuals who rated their physical health as "fair" to "poor" were twice as likely compared to those who rated their health as "good" to "excellent" to have a hospitalization in the prior 6 months. Twenty-five percent of those who rated their health as "fair to poor" had a hospitalization compared to 12 percent of those who rated their health as "good or excellent". This finding is consistent with the literature (16) that showed that in prior studies with the same instrument, perception of lower physical health was the best predictor of actual hospitalization. In this study 16 percent of participants experienced a hospitalization in the prior 6 months, with an average stay of 6.6 days. Differences in age, gender, race and income in this study did not

show statistically significant differences in terms of whether an individual experienced a hospitalization.

Assistive Devices

Assistive devices are important tools in managing health and prolonging independent living (6). Studies have indicated that the numbers of individuals reporting disabilities has not risen as fast as the elder population in general due to the increased utilization of assistive devices (8). Forty-eight percent of the participants in the study used at least one assistive device, with 17 percent using two or more. The most commonly used assistive devices were: cane (27 percent), hearing aid (16 percent), walker (11 percent), wheelchair (5 percent), and leg and back braces (2 percent each).

Eleven percent of the participants expressed an unmet need for an assistive device. Based on this study it can be estimated that approximately 2,000 low income seniors over age 75 have an unmet need for an assistive device. The most commonly cited was hearing aids, with 5 percent of participants stating they felt a need for a hearing aid which they did not have.



Tobacco Use

Tobacco use is a significant predictor of emphysema. Seventeen percent of those who stated they used tobacco products at some point in their life reported emphysema as compared to 8 percent of non-tobacco users. Overall, 45 percent of participants reported having used tobacco in

their lives (93 percent used cigarettes), but only 7 percent were still using tobacco products at the time of the interview. Half of those still using tobacco stated that they had tried to quit unsuccessfully in the prior 12 months.

Dental Care

Dental care was a major unmet need of low income elders in this study, with lack of financial resources accounting for a sizeable amount of the unmet need. Thirty-six percent of participants in the study stated that they had not seen a dentist in the prior 12 months, and 17 percent of this group stated lack of money as the reason for not seeing a dentist. Extrapolated over the entire county population, **approximately 1,250 low income elders over age 75 are not getting appropriate dental care due to lack of money**. It is important to note that "oral health is an important and often overlooked component of an older person's overall health and well-being. Oral health problems may hinder a person's ability to be free of pain and discomfort, to maintain proper nutrition, and to enjoy interpersonal relationships and a positive self-image" (6).

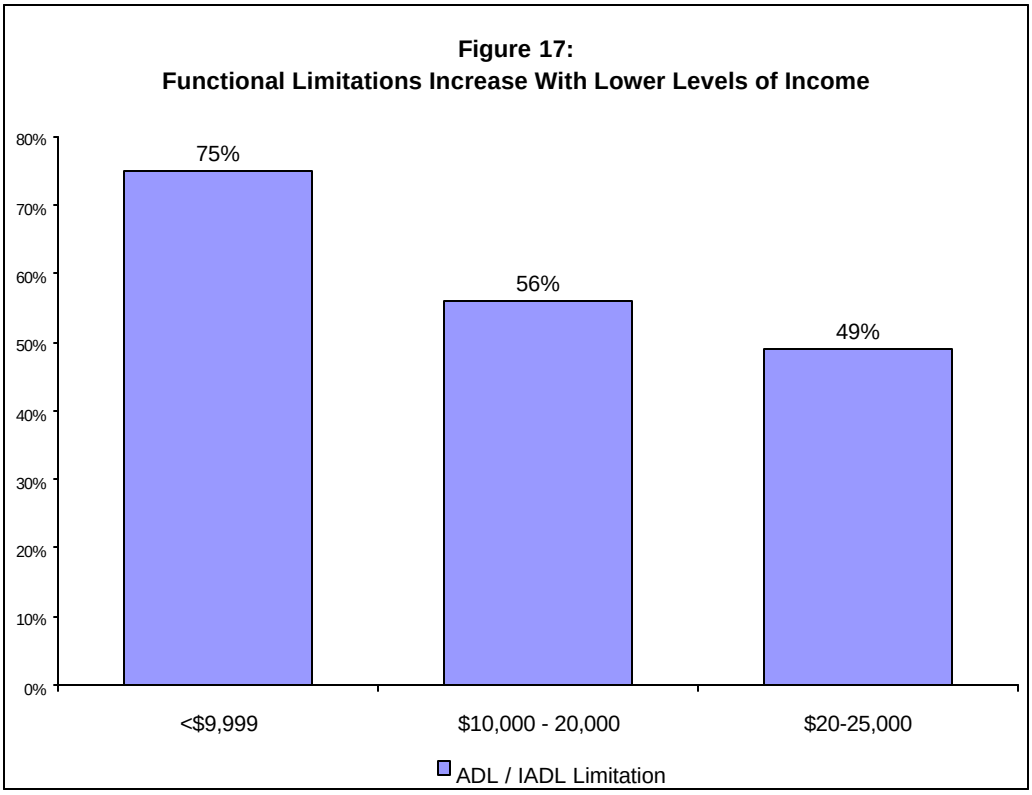
Physical Functioning and Disability

Studies have shown that income is highly correlated with disability among the elderly, with those below the poverty line twice as likely to report two or more Activity of Daily Living (ADL) limitations than elders in general (1). Quality of life among the elderly, along with the ability to remain independent, may be compromised if illness, chronic health conditions, or injuries limit their ability to care for themselves without assistance (6).

Functional well-being is commonly defined by whether individuals can perform specified activities under two categories: Activities of Daily Living (ADL) and Instrumental Activities of Daily Living (IADL).

- ADLs are such things as: eating, dressing, grooming, walking, getting in and out of bed, bathing and ability to use the toilet.
- IADLs are such things as: using the telephone, shopping, preparing meals, housework, taking medications, and handling money.

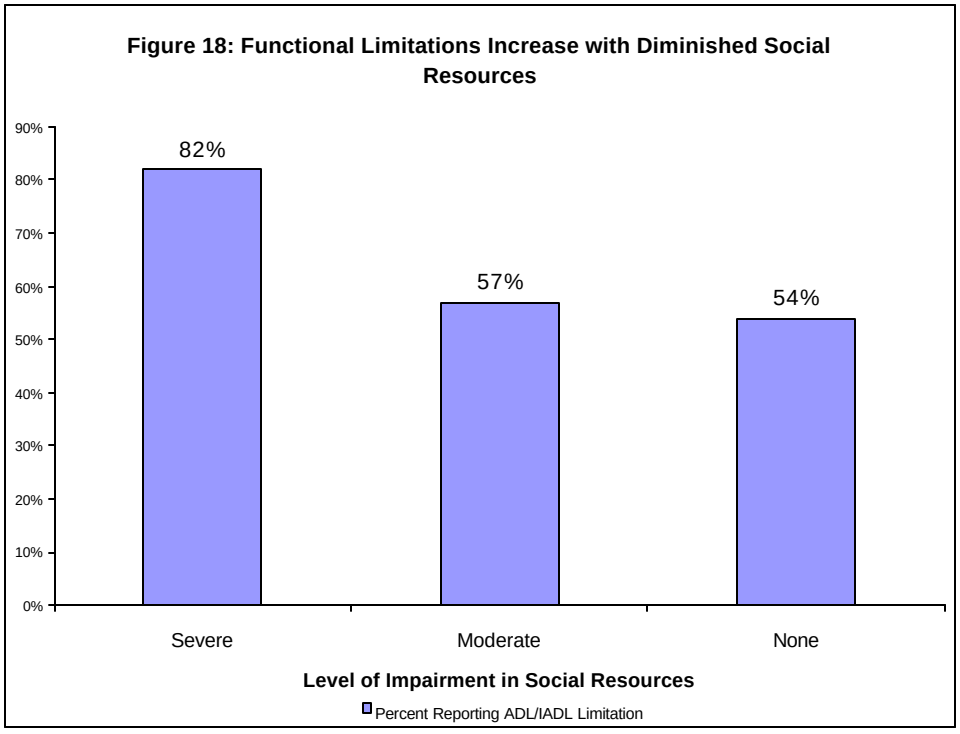
Fifty-eight percent of the participants in the study reported one or more problem with physical functioning, which is comparable with national averages for all individuals in this age group (6). Prior studies indicate that when asked global self-report questions regarding disabilities, elders significantly under report limitations in physical functioning as compared to when asked questions about specific areas of functioning. Professionals in the aging field report anecdotally that elders appear hesitant to give negative overall appraisals of their health and living status. A recent Harris Poll of all county residents age 65 and over indicates that 34 percent feel they have a limitation in mobility and/or self-care (9). However, this study and national data indicate that the true percentage with physical limitations is almost twice the global self-report level.



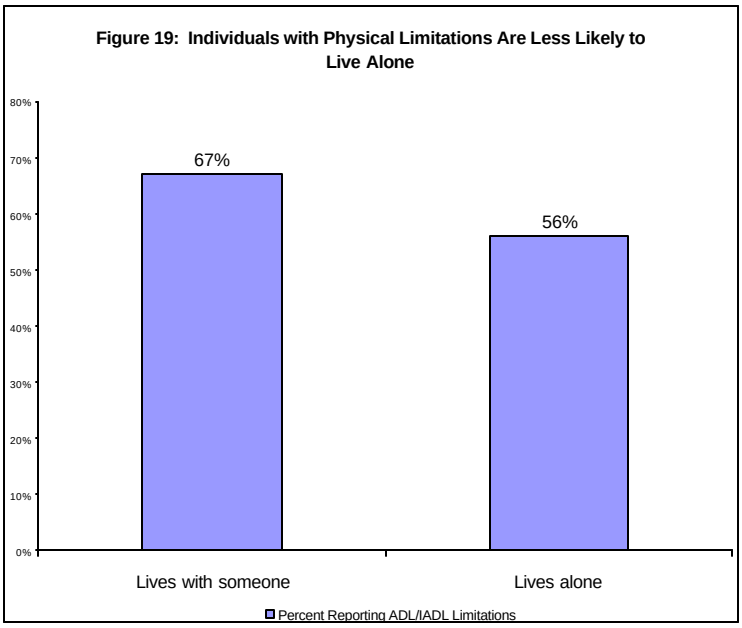
Differences in age (Table 11), income level (Figure 17), social resources (Figure 18) and living situation (Figure 19) were all correlated with statistically significant differences in levels of impairment in physical functioning. Race and gender in this limited study did not show any statistically significant differences in ADL/IADL levels, though national studies have shown that elderly women are more than 50 percent more likely to have impairments in physical functioning, and African-Americans are 130 percent as likely as Whites to have such limitations (6).

Table 11:
Participants Reporting Difficulty With Following Areas Of Physical Functioning

Problems with:	75-84	85 +	All 75+
Doing Housework	30%	59%	38%
Shopping	22%	41%	27%
Getting to Bathroom on Time	22%	31%	24%
Getting to places out of walking distance	19%	40%	25%
Walking	9%	21%	13%
Bathing/showering	9%	22%	13%
Handling money	6%	16%	9%
Preparing meals	6%	14%	8%
Using telephone	3%	6%	4%
Dressing/undressing	1%	8%	3%
Getting in/out of bed	2%	6%	3%
Taking medications	1%	2%	2%
Any physical limitation	51%	78%	58%



The presence of another individual in the home significantly influences an individual's ability to remain living independently. Studies have shown that living with a spouse is a primary factor contributing to the support and independence of the elderly (2). In this study, 67 percent of those living with someone had a physical impairment, compared to only 56 percent of those who were living alone. Based upon prior research in this area it can be inferred that the lack of another person in the home to help provide care to an individual with physical limitations often leads to their inability to remain living independently in the community (8).



Falls

Low income elders have both a higher risk of suffering injurious falls than other elders and fewer resources to deal with those injuries. Injuries sustained as a result of falls are a major risk factor for hospitalization and institutionalization in the elderly. While this study did not specifically ask participants about falls, a study conducted in Howard County, Maryland, in 2000 (17) had very similar demographics to our study population among its low income elders over age 75. Data from the Howard County study indicates that among those aged 75 and over, those in the lowest income group had a 50 percent greater risk of sustaining an injury as a result of a fall in the prior 12 months. In the Howard County study, 4 percent of all elders over age 75 had an injurious fall in the prior year, and 6 percent of low income elders had injurious falls. This finding is consistent with previous studies that indicate that 5 percent of those 65 and over suffer an injurious fall per year, with the rate increasing with age (7). The literature also indicates that injuries associated with a fall are exacerbated if the individual is living alone (12), as are 75 percent of the study population in Montgomery County. Using the results from the Howard County study, we can project that **approximately 1,900 seniors in Montgomery County over age 75 will sustain injuries severe enough to require medical attention from falls per year, and approximately 1,000 of those will be low income elders**. Given the higher likelihood of falls among low income elders, programs that serve to reduce falls would be most beneficial if targeted towards low income elders living alone.

IV. MENTAL HEALTH

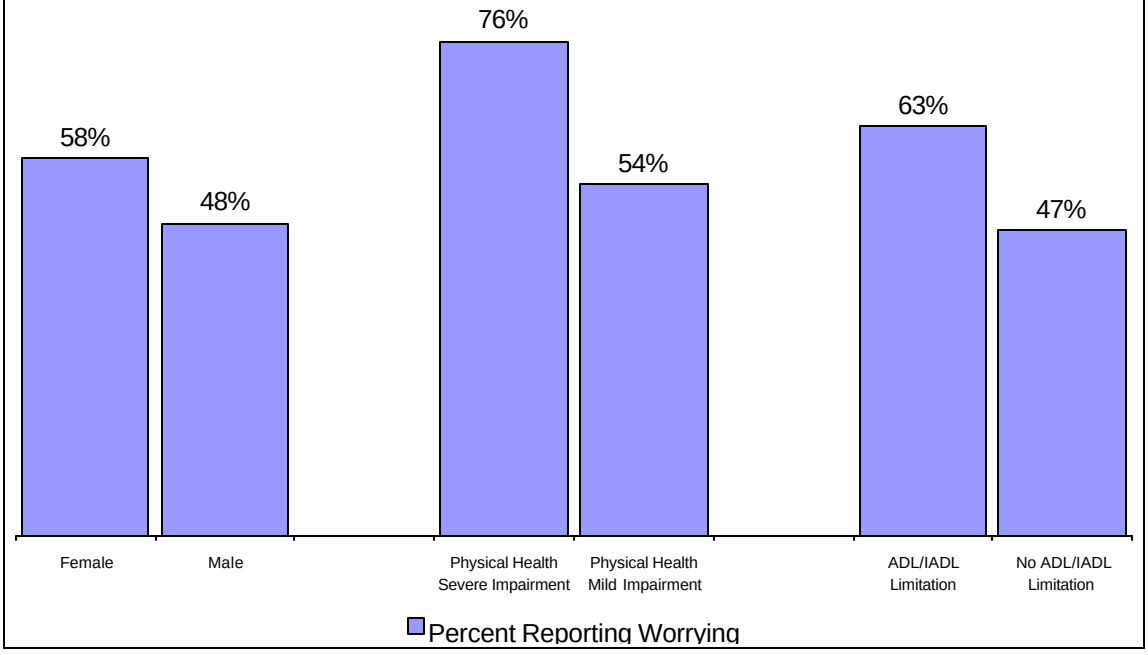
Mental and emotional health is related to how well individuals cope with the losses related to aging, including the death of loved ones, deteriorating health and physical functioning, and reduced income and social interactions (10). Studies have shown that low income elders are at particular risk of mental health impairment because as economic resources decrease, so do the opportunities to use mental health services and access outside social supports (5).

A limitation of the study is that cognitively impaired elders were not adequately represented in the sample population. National studies indicate that between 14 and 20 percent of individual's age 75 to 84, and 36 percent of those 85+ have moderate to severe memory loss. However, the vast majority of participants in this study were cognitively intact with 97 percent rated as having normal cognitive function. Under representation of individuals with cognitive impairments is probably due in part to the fact that individuals with cognitive impairments were less likely to reside independently in the community, and caregivers of individuals with cognitive deficits might have been less likely to agree to participate in the study.

Worrying

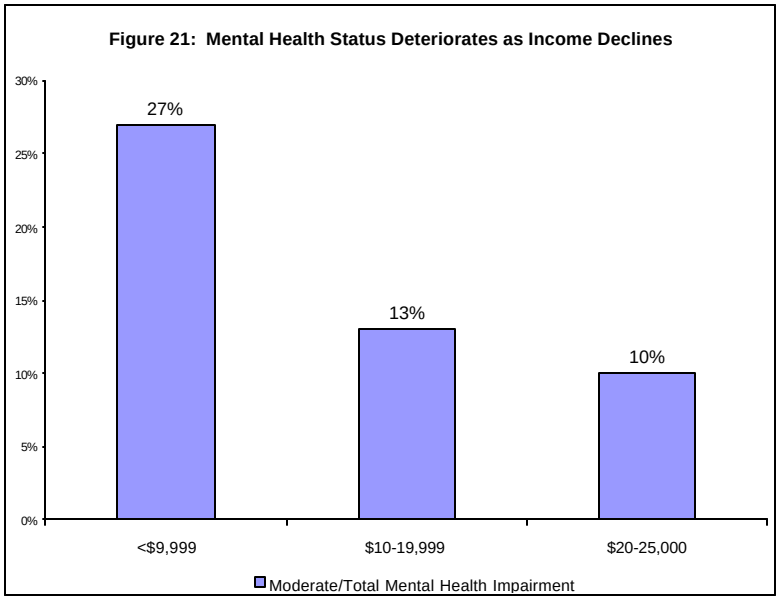
Fifty-six percent of participants stated that they worry "fairly" to "very often", with 20 percent stating that they worry "very often". Physical health (as measured by the OARS construct) and presence of physical limitations were correlated with level of worrying. Gender reflected differences in patterns of worrying, but due to the relatively small numbers of men in the study it was not statistically significant. Age, income, whether someone lives alone or not, and race were not correlated with any differences in self-report of worrying.

Figure 20: Worrying is Correlated with Gender and Health Status

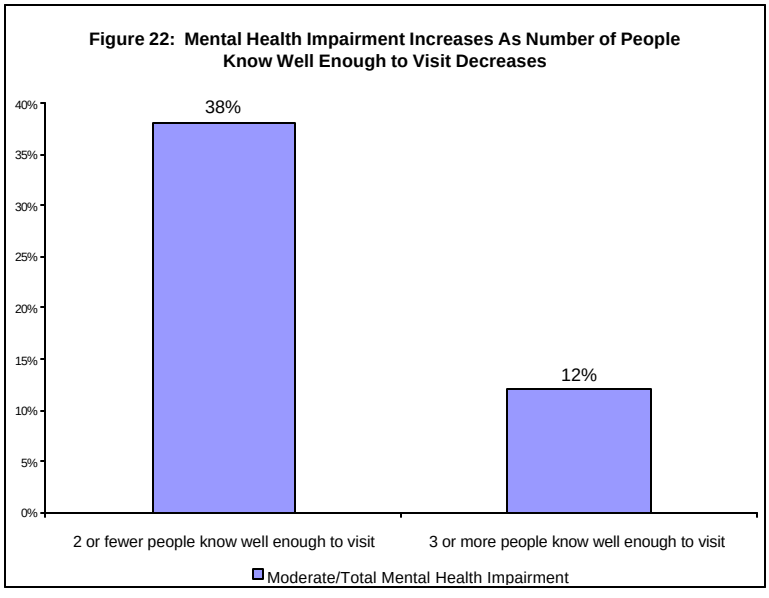


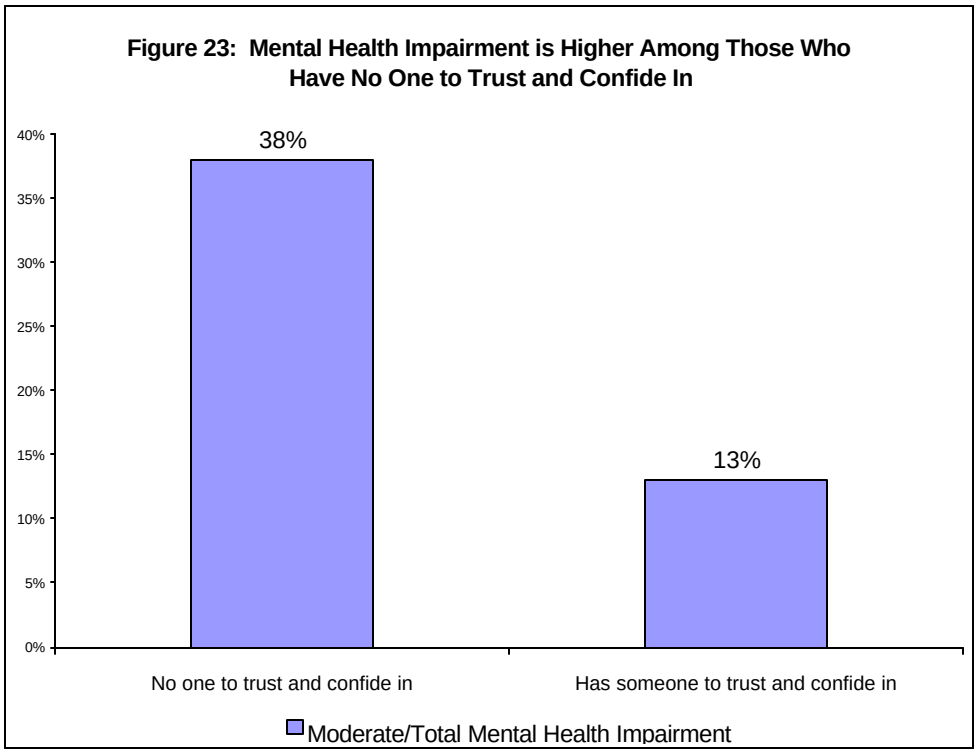
Mental Health Constructs

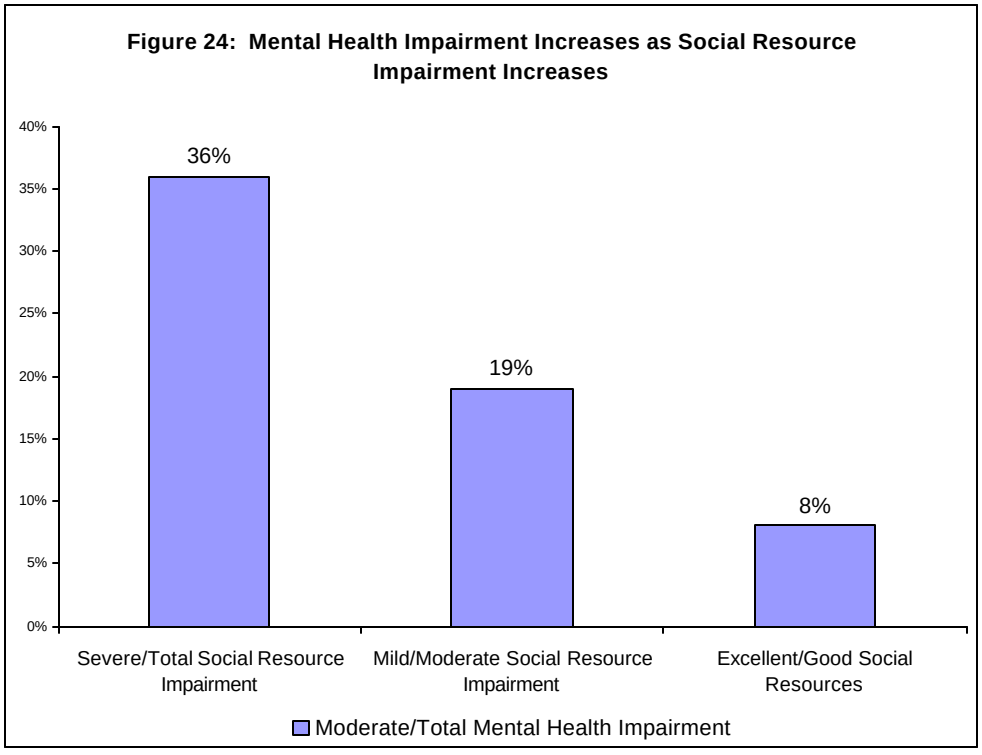
Mental health impairment, as measured by validated subscales of the survey instrument, was found to correlate with income, social interaction, and physical well-being. As income, social interaction, and physical health declined, there was an associated increase in mental health impairment. It is important to note that associations do not imply causation, and there is likely an interplay between mental health impairment and other measures of well being.



Level of socialization, as illustrated in Figures 22 – 24, was found to be significantly related to degree of mental health impairment. As all three graphs indicate, individuals with fewer social contacts had approximately three times the rate of moderate to severe mental health impairment. This finding points out the importance of identifying, and providing access to socialization programs for elderly individuals who are socially isolated.







Physical health and functioning were also found to be significantly correlated with mental health status (Figures 25-27) . As would be expected, as physical health and functioning declined, so did mental health status.

Figure 25: Mental Health Impairment Was 8 Times Higher Among Those with Physical Limitations

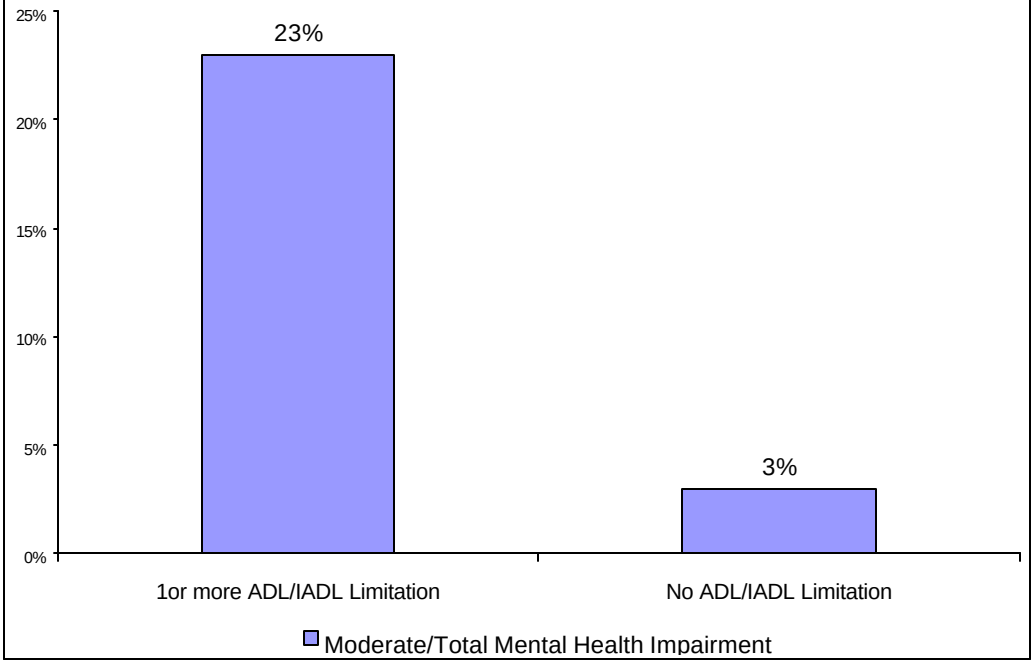
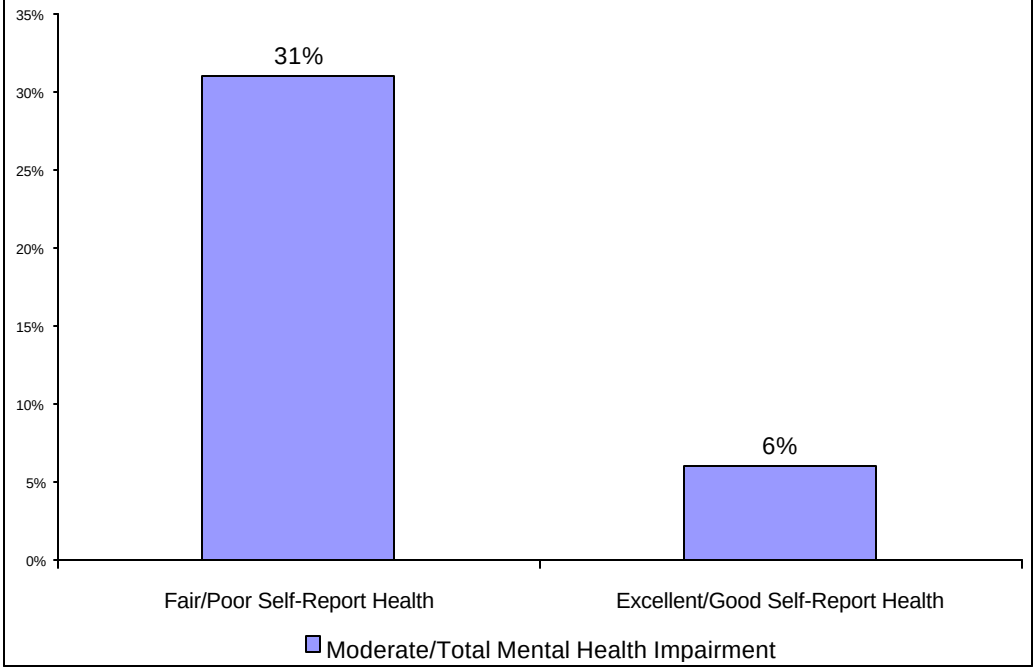
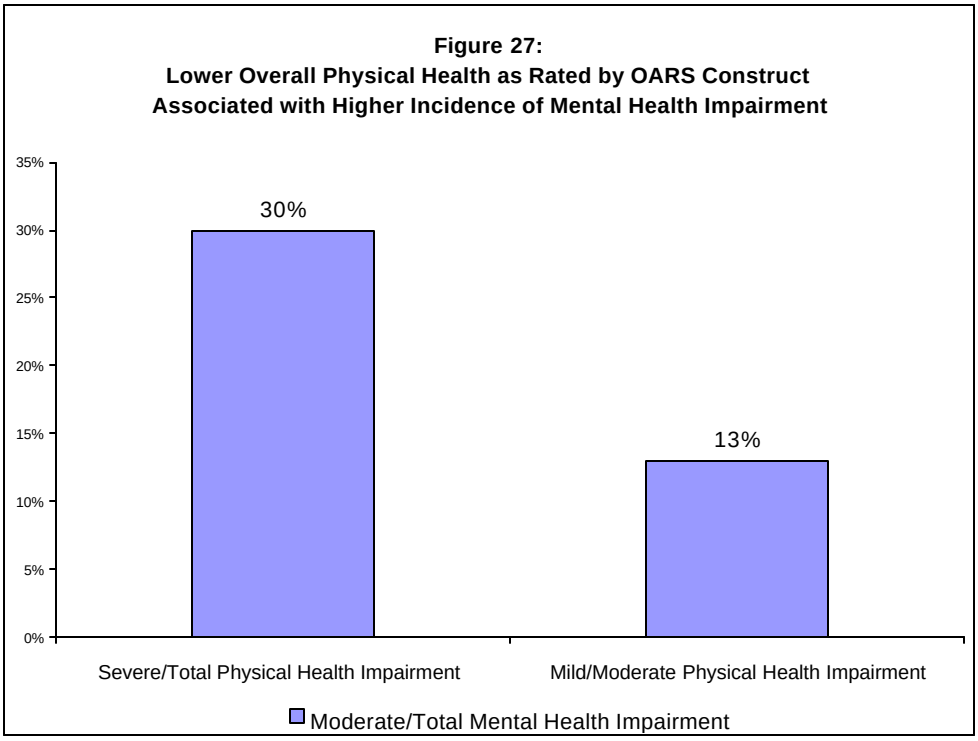


Figure 26: Poor/Fair Self-Report of Health Linked with Higher Level of Mental Health Impairment





Loneliness

Thirty-six percent of participants reported feeling lonely, with 9 percent stating that they feel lonely "quite often". Individuals who stated that they know two or fewer people well enough to visit in their homes were more than twice as likely (18 percent compared to 7 percent) to report loneliness. Similarly, those who reported one or fewer visitors in the past week reported three times the rate of feeling lonely "quite often" as those who had a visitor every day. Women reported slightly higher levels of feeling lonely "quite often" (9 percent versus 6 percent for men), but due to the relatively small number of men in the sample this was not statistically significant. Age, income, and whether a person lived alone were not correlated with self-report of loneliness.

V. SOCIAL RESOURCES

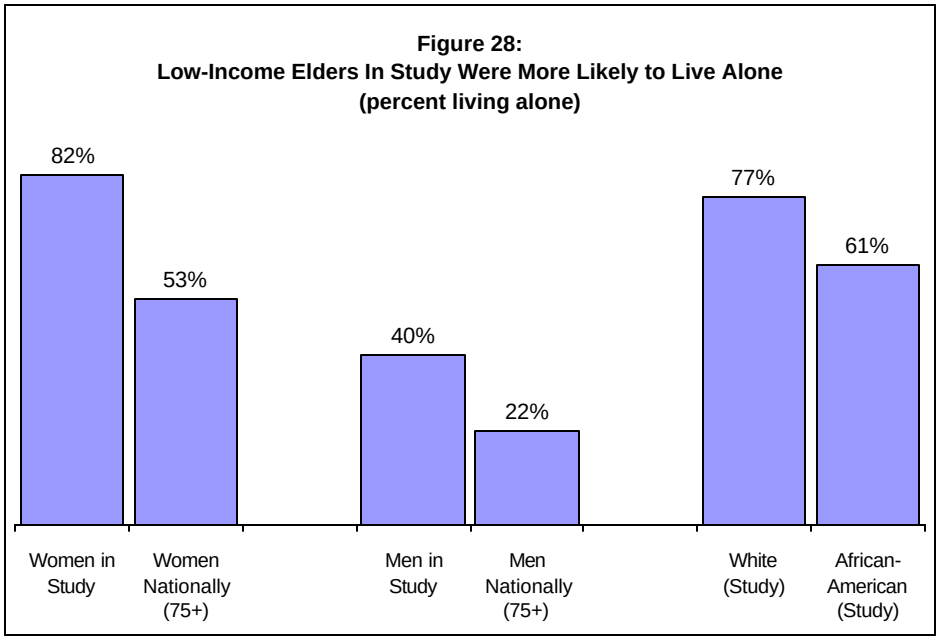
An important predictor of overall mental health, and the ability to continue to live independently in the community, is the level and extent of social resources and relationships. Studies have indicated that low levels of social activity are predictive of institutionalization, functional impairment and mortality (20). Factors related to the ability to live independently in the community include: How often they see other individuals; whether individuals participate in organized social or recreational activities; the presence or availability of potential caregivers in the event of illness; and overall well-being, which as outlined in the prior section of this report, is correlated with extent of social contacts.

Older individuals who live alone, compared to those who live with a spouse, are more likely to be in poverty (3). Other studies have shown that living alone is also linked with diminished physical health and less availability of caregivers. This study shows that low income elders live alone at a much higher rate than the general population of this age. This puts them at heightened risk for requiring services and institutionalization due to lack of economic, social, and caregiver resources (15).

Living Arrangement

A large majority of participants in the study lived alone (75 percent), with only 10 percent living with a spouse and another 9 percent living with other family or friends. Six percent of participants indicated they lived with someone else, but did not specify relationship. Consequently, low income elders are significantly less likely to have family or friends living with them who can assist with medical, financial and socialization needs (14). Women are approximately twice as likely to live alone as men, a figure consistent with national trends.

Figure 28:
Low-Income Elders In Study Were More Likely to Live Alone
(percent living alone)



Availability of Caregiver

Almost half of the participants do not feel there is someone who would take care of them indefinitely in the event they become sick or disabled. Ninety-three percent of participants felt there was someone who would help them if they became sick. However, 44 percent stated that the amount of care they could expect if they became sick ranged from only a "short time" to "none at all". Of those anticipating that someone would care for them indefinitely in the event of sickness or disability, 69 percent were relying on children, 6 percent on a spouse, 10 percent on other relatives, and 7 percent on a friend.

A group that is at particular risk due to lack of an identified caregiver is individuals who never married. Forty-four percent of those who were never married stated they did not have anyone to take care of them if they became sick or disabled (compared to 5 percent of all other study participants). Given that national statistics and this sample indicate that approximately 5 percent of the population is never married, this means that extrapolating from the 45 percent figure, there are **approximately 1,000 never married individuals of all income levels over age 75 in Montgomery County who have no one to care for them if they become ill**.

Social Isolation

Ninety-eight percent of the participants reported that they know one or more people well enough to visit in their home, and 76 percent stated they know five or more people well enough to visit. However, it is interesting to note that while only two percent stated they didn't know anyone well enough to visit, 15 percent had no visitors in the entire week preceding the interview. An additional 14 percent had only a single visitor. Thus**, 29 percent of participants, based on having visited with one or fewer other individuals in the prior week, can be considered to be socially isolated**.

Table 12:
Social Isolation As Reflected In Lack Of Contact With Others

	One or fewer visitors in prior week	Do not see family/friends as often as desired	Do not travel to social/recreation activities	Do not travel to religious activities
Men	38%	56%	42%	61%
Women	27%	40%	37%	39%
White	28%	44%	38%	46%
African-American	37%	33%	33%	12%
All 75+	29%	43%	38%	42%

Males are the most socially isolated group. As is reflected in Figure 29 (below), males were 11 percent more likely to have 1 or fewer visitors, 16 percent more likely not to see family and friends as often as they desired, 5 percent less likely to travel to engage in social/recreational activities, and 12 percent less likely to travel to attend religious activities. African-American participants (Figure 30 below) reported fewer visitors per week, but were more likely to engage

in social, recreational and religious activities. African-American participants were significantly more likely to live with family members (39 percent compared to 23 percent for Whites), which is consistent with lower report of dissatisfaction with level of family contact. Among individuals who never married (5 percent of the total sample), half reported 1 or fewer visitors in the prior week, but on average these individuals participated in higher levels of social, recreational and religious activities.

Figure 29:
Men are More Socially Isolated Than Women

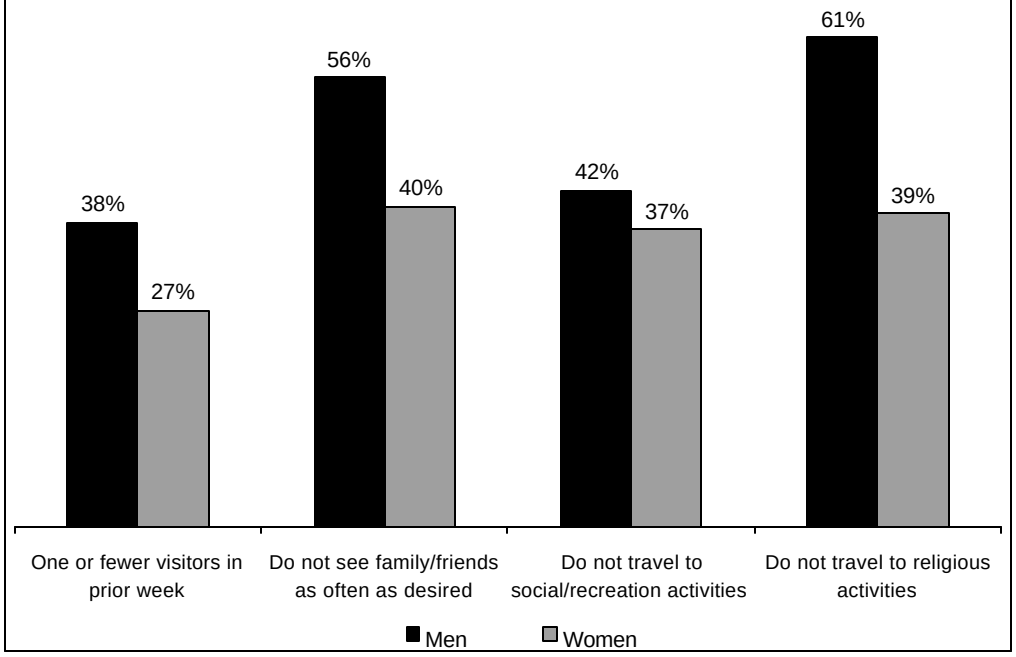
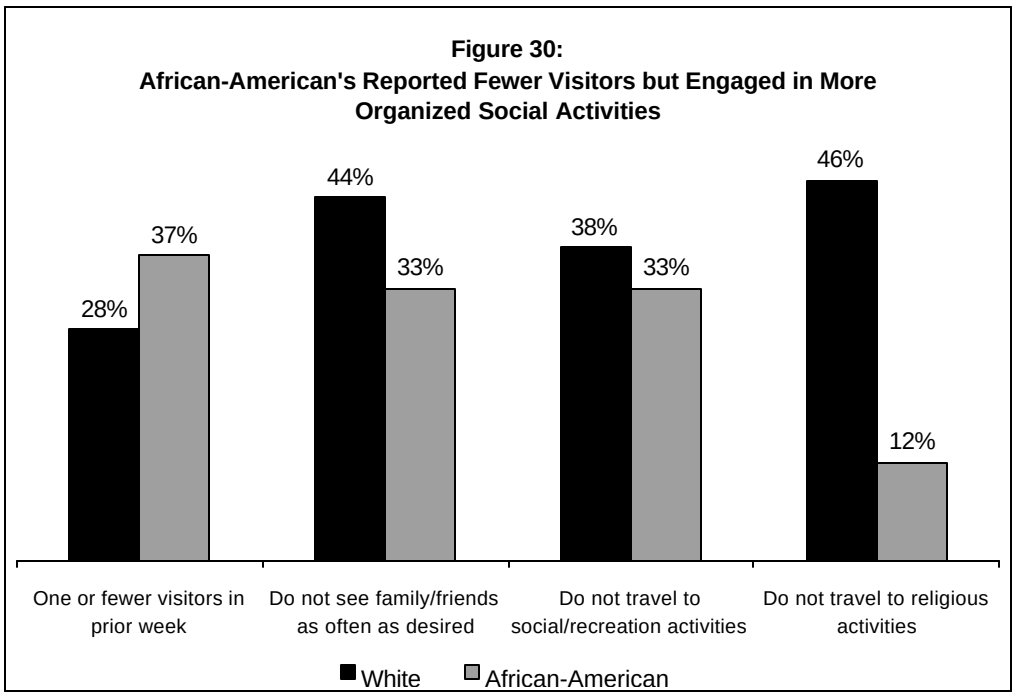


Figure 30:
African-American's Reported Fewer Visitors but Engaged in More Organized Social Activities



Organized social activities are an unmet need for 17 percent of study participants. Comparing self-report of desire to engage in social activities and actual participation, it is found that 17 percent of participants feel a need to participate but have not done so in the last 6 months. This extrapolates to approximately 2,800 low income elders over the age of 75 in the county. A notable characteristic of those who report an unmet need for more social activity is that they are almost twice as likely as other study participants to be rated as having psychiatric symptoms. They are also slightly more likely to be widowed (77 percent) and have physical limitations (67 percent) than the total sample. Differences in age, race and gender were not related to differences in unmet socialization needs.

Transportation difficulties are significantly related to feelings of social isolation. Three of the variables mentioned above, with the exception of number of visitors in the prior week, were correlated with questions that dealt with availability of transportation. Participants who identified a need for more transportation also reported seeing relatives less often than they wanted, and not traveling to social, recreational, and religious activities (Section VIII. Transportation of this report describes findings in detail).

VII. SERVICES

Prior studies have shown that low income individuals are both more likely to have a greater need for services and to have lower service utilization (16). This finding places low income seniors at heightened risk of institutionalization, since formal and informal supportive services are critical to allowing elders to remain independent in the community after the onset of illness or disability. In addition, the literature shows that low income elders are more likely to have lower levels of physical health and functioning, and impaired mental health status. This group is also less likely to have family resources available to assist them and is less likely to visit physicians, particularly for preventive health care (16).

Eighty-six percent of the study population received one or more services to assist them with illness or disability, either from a formal or informal caregiver. Older individuals received more services, with 76 percent of those aged 85 and over receiving two or more services compared to 46 percent of those aged 75 to 84. There were minor, though statistically insignificant, differences between groups on the basis of age, race, gender and income. As can be seen in Table 13, the majority of services increased with age, with the exception of hospitalization, physical therapy and finding a new place to live, which decreased among the oldest-old age group. Outpatient doctor visits and nursing home stays were basically constant across the different age categories.

Table 13:
Services Used By Participants

Service	All 75+	75-84	85+
One or more services[1]	86%	84%	90%
Two or more services[1]	62%	46%	76%
Checking Service	60%	60%	62%
Help with shopping, housework, bathing	45%	37%	66%
Help with cleaning, washing, chores	30%	23%	47%
Help with legal/financial matters	22%	18%	31%
Thorough medical/social evaluation	20%	18%	26%
Help with meal preparation or cost	17%	14%	23%
Hospitalization	17%	18%	14%
Physical therapy	16%	17%	15%
Help with personal care	11%	7%	18%
Nursing care	8%	6%	12%
Continual supervision	5%	4%	8%
Nursing home stay	5%	6%	5%
Help finding new place to live	3%	4%	1%

[1] "service" does not include visits with physicians in outpatient setting

Checking and Continual Supervision

Sixty percent of participants reported that someone regularly (at least five times a week) checked on them by phone or in person to ensure that they were all right. Eighty-two percent of those providing checking service were unpaid family members and 39 percent were unpaid friends, with some duplication of service. Checking service tended to persist over time, with 97 percent of those who had received it at some time in the prior six months also receiving it at the time of the interview. A slight majority of the participants (55 percent) reported that they did not feel a need for the service, though it is apparent that family and friends thought otherwise due to the persistence of the service. Individuals living alone were significantly more likely to report someone checking on them (65 percent compared to 45 percent for those living with someone). Only four percent of participants were receiving checking services from someone other than family or friends. In relation to unmet need, **four percent of participants (approximately 600 county low income elders over age 75) reported that they felt a need for checking services and had not received any in the prior six months**.

Five percent of participants reported receiving continuous supervision, which has been identified as a significant predictor of caregivers ending the caregiving role, which in turn can often result in institutionalization (8). Fifty percent of those who had received continuous supervision were still receiving it at the time of the interview, and all of them felt a need for the service. Eighty-one percent of those providing this service were unpaid family or friends, and 31 percent were paid agency providers, with some overlap in service. The 85 and over age group was twice as likely to require supervision as those aged 75-84, and 69 percent of those receiving continuous supervision also received personal care services in the prior six months. Individuals receiving this level of supervision had a significantly higher level of medical insurance coverage than the sample participants, with 94 percent having Medicare plus another form of insurance.

Personal Care and Homemaker Services

Almost half of the participants (49 percent) received some form of personal care or homemaker services, which is typically delivered in response to ADL or IADL limitations. The likelihood of receiving some form of personal care or homemaker service increased with age, but there was no significant difference on the basis of gender, race, or income level. Significant numbers of low income individuals had unmet needs related to personal care and homemaker services, which place them at higher risk for deterioration of physical functioning (16).

Forty-five percent of participants reported that they received help with shopping, housework, bathing, dressing, and getting around. Fifty-four percent of these individuals received help from family or friends, and 46 percent from a paid agency provider. Those age 85 and over were almost twice as likely to report this service compared to those ages 75-84 (66 percent versus 37 percent). Women (46 percent) and Whites (45 percent) were both 11 percentage points more likely to receive this service than then males and African-Americans. Of note is that **31 percent of those with physical limitations, including 42 percent of males, did not receive this service**.

Thirty percent of participants stated that they received help in the prior six months with routine household chores such as cleaning and washing clothes. Those age 85 and over where twice as likely to receive this service compared to those ages 75-84 (47 percent versus 23 percent), though no significant difference existed on the basis of gender, race or income level. The majority of individuals (79 percent) who received this service got it through a paid agency provider, and 32 percent received more than 4 hours per week of service. In terms of gaps in service, **35 percent of participants who stated earlier in the interview that they had difficulty doing housework were not receiving any assistance**. **This unmet need extrapolates to approximately 2,250 low income elders in the county over age 75.**

Seventy-six percent of those who report ADL limitations in the areas of bathing, dressing, feeding and using the toilet, stated that in the prior 6 months they had not received any assistance in these activities. **This amounts to 27% of the entire sample (approximately 4,500 low income elders over age 75 in the county)**. Eleven percent of the total sample did receive personal care assistance, and all of those currently receiving this service felt a need for it. Seventy-two percent of the help came from a paid agency provider and 41 percent from a family member, with some overlap. Two percent of the total sample received more than an hour and a half of personal care daily from a family member, a factor cited in the literature as a significant risk factor for family caregivers ending the caregiving role which then contributes to institutionalization (8).

Legal, Financial and Business Matters

Twenty-one percent of participants reported receiving help with legal, financial or personal business matters. Women (23 percent) were more likely to receive this service than men (14 percent). Those age 85 and over and those with the lowest incomes were more likely to receive this form of assistance (31 percent age 85 and over compared to 18 percent for those ages 75-84). In terms of income groups, those with incomes under $10,000 per year (34 percent) were more likely to report this form of assistance than individuals with incomes over $15,000 (22 percent). Seventy-one percent of this form of assistance was provided by families and friends, and 38 percent was provided by paid professionals, with some overlap. It is notable that **28 percent of those who identified themselves as needing help handling their money stated that they were not receiving any assistance in this area. This amounts to 6 percent of the total sample, which extrapolates to approximately 1,000 low income elders over age 75 in the county**.

Evaluations

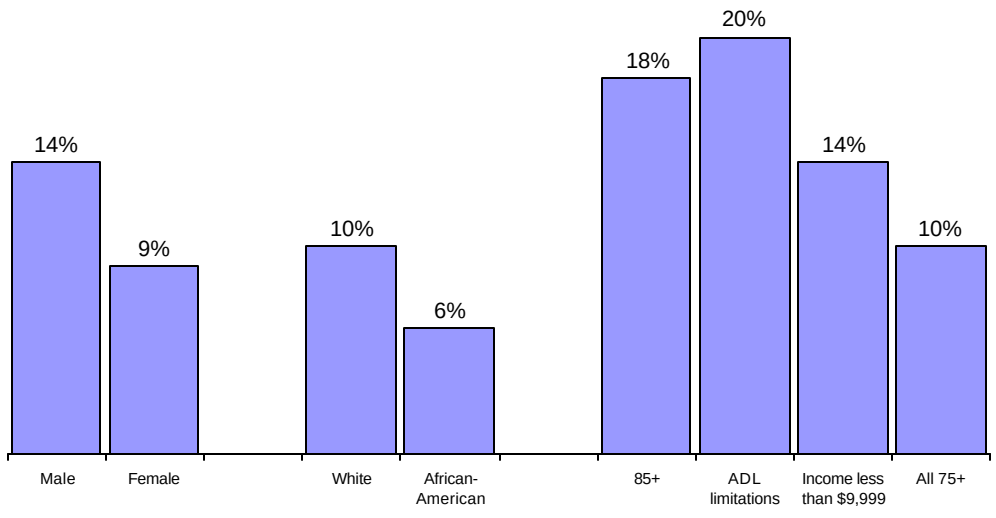
Twenty percent of participants reported that during the prior six months they had received a thorough review of their overall condition (health, mental health, social and financial situation) from a doctor or social worker. Men were more than twice as likely to receive this form of evaluation (37 percent compared to 17 percent for women). African-Americans (31 percent), those with incomes under $10,000 (32 percent), and those age 85 and over (26 percent) also were significantly more likely to receive a thorough evaluation of status. Individuals with incomes over $20,000 were the least likely to have received a thorough assessment, with only 13 percent reporting. The presence of physical limitations, either in the form of ADL or IADL problems, was not related to whether a person had received a thorough evaluation. In fact, **79**

percent of individuals with identified physical limitations did not receive a thorough evaluation of their overall health in the prior six months. Explored in terms of unmet need, the study shows that **7 percent of participants stated that they felt a need for an evaluation of this nature and had not had one, and none of the 5 percent of the sample who were rated by a validated instrument construct as having severe to total mental health or psychiatric impairment had received an evaluation**. Extrapolated over the total low income elder population in the county we can estimate that **approximately 1,100 individuals feel an unmet need for an evaluation, and more than 800 individuals with severe mental health impairment are in need of such an evaluation and not receiving it**.

Meals

Ten percent of participants reported receiving regular assistance with meal preparation with the vast majority (90 percent) citing inability to prepare meals for themselves as the reason for this service. Eighty-four percent of those who had received this service in the prior six months were still receiving it at the time of the interview. Fifty percent received unpaid assistance from a family member or friend, and 58 percent from a paid provider. In terms of unmet need, 33 percent of participants who cited difficulty preparing meals did not receive any meal preparation assistance in the prior 6 months. While this accounts for only 3 percent of the total sample, extrapolated over the entire county elderly population we can estimate that **approximately 500 low income seniors over age 75 have an unmet need for meal preparation assistance**.

Figure 31:
Individuals with ADL Limitations, Incomes Under $10,000, those 85+, and Men were More Likely to Receive Assistance with Meal Preparation.



Federally funded senior nutrition programs, such as congregate meals, have demonstrated that socialization increases nutritional status of individuals. Examination of the data from this study shows that **45 percent of those rated by the OARS construct as having moderate to total social impairment were not receiving any form of assistance with meals, which extrapolates to over 2,000 low income senior over age 75 in the county**.

Nursing and Physical Therapy

Eight percent of participants received nursing services in the prior 6 months, with the vast majority (87 percent) of the service provided by a paid agency. Sixty-one percent of those who received nursing services required it for a month or longer. All of the participants who received this form of service felt a need for it, with 21 percent for whom service had been discontinued stating that they felt a continued unmet need for this service. The finding that the majority of nursing care is provided by paid agencies is consistent with practice experience, showing that as the service becomes more skilled and intimate the provision of service shifts from family and friends to paid providers. This points out a potential vulnerability in individuals' expectations that their future care needs will be provided by family members or friends. Ninety-one percent of participants expressed the belief that if care was needed it would be provided by family or friends. However, findings suggest that as care needs become more skilled and intimate, it becomes more likely that individuals will have to go outside of their informal network to receive assistance.

Sixteen percent of participants received physical therapy services in the prior 6 months, with virtually all (98 percent) of the service provided by a paid agency. Seventy-seven percent of those who received physical therapy received two or more sessions per week, and 31 percent were still receiving it at the time of the interview. Eighty percent of those that received physical therapy felt they needed this service. There existed a variety of unmet needs in regards to physical therapy:

- **29 percent of those who had discontinued physical therapy felt a continued unmet need for this service;**
- **57 percent of those who stated they felt a need for physical therapy had not received it in the prior 6 months (extrapolates to 1,600 low income seniors over age 75 in the county); and**
- **71 percent of those who stated they felt a need for physical therapy were not receiving it at the time of the interview.**

Place to Live

Eight percent of participants stated they felt a need to find a new place to live. Those with incomes over $20,000 were five times as likely to feel a need to move as those with incomes under $10,000. Characteristics of those citing a need to move include:

- 44 percent cite cost of housing as reason for needing to move;
- 40 percent cite a need for more supportive services; and
- 24 percent cite a need to be closer to services.

Fifty-six percent of those who felt a need to move also expressed a need for assistance in finding a new home. However, only 20 percent had received assistance in this area. Extrapolated over the entire county, approximately 5 percent of low income seniors over age 75, or around 800 individuals, have an unmet need for assistance in finding a new place to live.

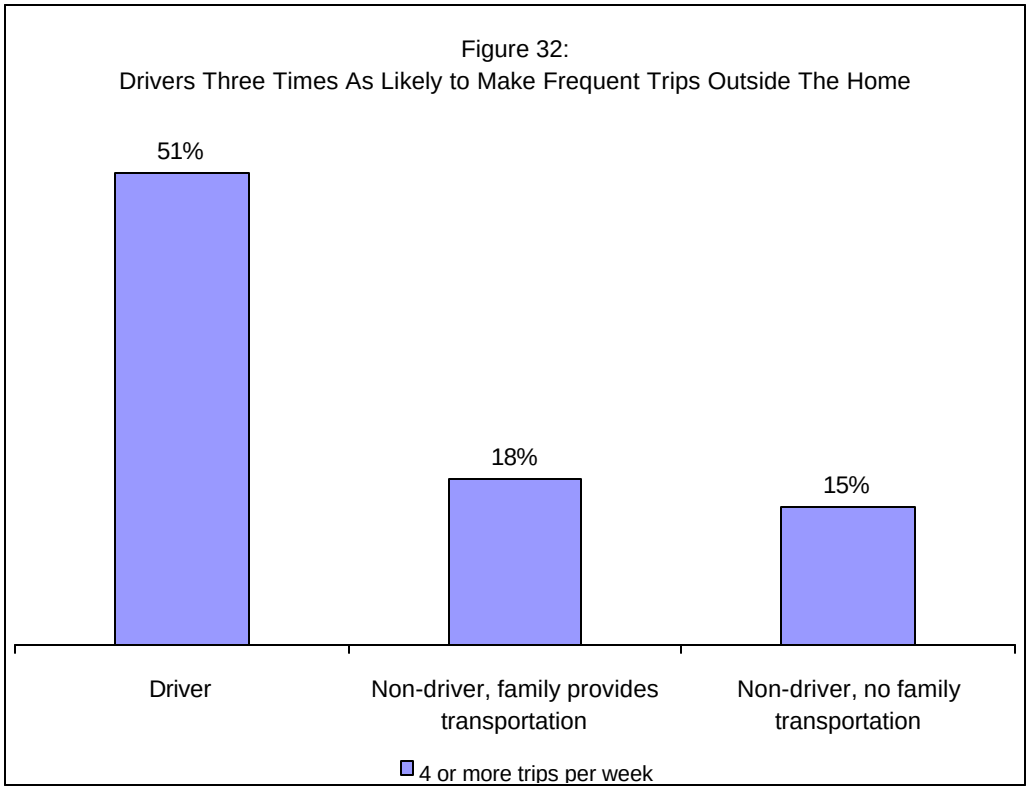
VIII. TRANSPORTATION

Transportation is a vital need for elderly individuals who want to remain living independently in the community. Prior studies have shown that utilization of services and maintenance of healthy social support networks are influenced by access to resources (13), which in suburban jurisdictions such as Montgomery County is largely accomplished by means of private and public transportation. Transportation is also associated with feelings of competence and self-sufficiency in the elderly, due to the combined effect of elders being able to take care of their own needs without relying on others, and the ability to reciprocate favors (13).

Sixty-five percent of participants reported they provided their own transportation or received it from a relative with whom they reside. The majority (57 percent) drove themselves, while 8 percent relied on a family member who lived with them. Nationally, 73 percent of all elders over age 75 report that they drive (18). An additional 22 percent of participants stated that they received transportation from a relative who did not live with them. Individuals who could not provide their own transportation, or rely upon a family member, used public transportation (8 percent), relied on friends (4 percent) or relied on a public agency (3 percent). Of note is that 41 percent of those who provide their own transportation as a driver have physical limitations (Table 19).

Individuals who have the capacity to provide their own transportation as drivers were three times as likely to make frequent trips outside their home. Fifty-one percent of drivers, as opposed to only 18 percent of non-drivers, reported averaging 4 or more trips outside their home per week. Nationally, among those age 75 and over, drivers make three times as many trips as non-drivers (18).

Figure 32:
Drivers Three Times As Likely to Make Frequent Trips Outside The Home



Low income elderly women have less immediate access to transportation, and more personal security concerns related to transportation, yet engage in more social activities than men. As illustrated in Table 14, women are less likely to be drivers, but more likely to be passengers in automobiles. Women also report a higher incidence of making fewer than one trip outside their home per week. In terms of barriers to transportation, women are more likely than men to cite personal security, time of day of activity, illness, and availability of transportation as reasons for limiting their travel. Despite this decreased level of transportation, women are almost 50 percent more likely to travel to organized social activities such as religious services.

Table 14:
Effect of Gender on Transportation Utilization

Activity	Women	Men
Drive Automobile	52%	68%
Passenger in Automobile	67%	54%
Makes fewer than 1 trip per week	18%	12%
Limit travel due to personal security concerns	23%	10%
Limit travel due to time of day of activity	43%	26%
Limit travel due to illness	32%	16%
Limit travel due to availability of transportation	33%	18%
Travel to religious activities	61%	39%

Increasing age was associated with fewer trips outside the home, more reliance on others for travel, and a higher level of unmet transportation needs. As illustrated in Table 15, compared to those ages 75-84, individuals age 85 and over were almost twice as likely to make infrequent trips outside the home, were 50 percent less likely to drive, and consequently more likely to rely on family for transportation. Those age 85 and over were also almost twice as likely to report that they needed more transportation than was currently available, and cited availability and travel time as barriers that distinguished them from those ages 75-84.

Table 15:
Effect of Age on Transportation Utilization

Activity	75-84	85+
Makes fewer than 1 trip per week	14%	24%
Drive Automobile	61%	39%
Family provides transportation	35%	58%
Limit travel due to availability of transportation	29%	36%
Limit travel due to travel time	12%	18%
Need more transportation than currently have	17%	32%

African-Americans report a higher level of unmet transportation needs, associated with lower average income and significantly lower number of drivers. As illustrated in Table 16, African-American participants in the study reported almost two-thirds as many unmet transportation needs as Whites, and were less likely to drive automobiles. African-American survey participants made the same number of trips outside the home as White study participants,

and actually engaged in more organized social activities, but were highly dependent on family members to provide transportation. These findings are consistent with prior studies that have found cultural differences between African-Americans and Whites in terms of level of family support and engagement in organized social activities.

Table 16:
Effect of Race on Transportation Utilization

Activity	African-American	White
Drive Automobile	39%	57%
Family provides transportation	61%	39%
Travel to religious activities	46%	12%

As income decreases, the number of people able to provide their own transportation decreases and the level of unmet transportation needs increases. As illustrated in Table 17, individuals in the lowest income group were three times as likely to make infrequent trips outside their home, had three times the level of unmet transportation needs, had one-third the number of automobile drivers, and seven times the level of reliance on public agencies for transportation.

Table 17:
Effect of Income on Transportation Utilization

Activity	< $9,999	$20 – 25,000
Makes fewer than 1 trip per week	11%	32%
Drive Automobile	21%	68%
Family provides transportation	59%	44%
Limit travel due to availability of transportation	43%	25%
Limit travel due to illness	41%	18%
Need more transportation than currently have	30%	10%

Impairment in social resources is highly associated with fewer trips outside home, fewer trips to social activities, and less availability of means of transportation. Prior research suggests that lack of adequate transportation leads to social isolation and mental health difficulties (13). Individuals rated by the OARS instrument as having moderate to severe impairment in social resources have significantly more transportation related issues, including: fewer transportation resources, more social isolation, more barriers to travel, and higher unmet needs for transportation. Given the association cited in the literature between lack of personal resources, mental health impairment and utilization of preventative health services, it is troubling to note that those with impairments are therefore at increased risk due to lack of transportation options (5).

Table 18:
Effect of Social Resource Impairment on Transportation Utilization

Activity	Moderate/severe social resource impairment	Excellent/Good Social Resources
Makes fewer than 1 trip per week	41%	14%
Drive Automobile	50%	70%
Passenger in Automobile	35%	58%
Walk as means of transportation	18%	37%
Never travel to meet family/friends	59%	11%
Never travel to social activities	62%	31%
Never travel to religious activities	65%	35%
Never go shopping	20%	6%
Limit travel due to illness	35%	24%
Limit travel due to availability of transportation	50%	25%
Need more transportation than currently have	44%	15%

Physical limitations were associated with significantly fewer trips outside the home, engagement in fewer social activities, and a corresponding increase in mental health impairment. Studies have shown that limitations in physical functioning contribute to reduction in social interaction, which in turn has been shown to contribute to impairment in mental health status (5, 13). Nationally, 61 percent of those who discontinue driving do so because of physical impairment (18). As illustrated in Table 19, participants in the study who had physical limitations in the form of ADL or IADL problems were five times as likely to make infrequent trips outside the home, were less likely to drive an automobile, three times as likely to never travel to meet friends or family, and twice as likely to never travel to social activities as those with no physical limitation. The major barriers to transportation identified by those with physical limitations were: weather (69 percent), illness (39 percent), unsafe walking (37 percent), and lack of availability of transportation (38 percent).

Table 19:
Effect of Physical Limitations on Transportation Utilization

Activity	ADL/IADL Impairment	No Physical Limitation
Makes fewer than 1 trip per week	27%	3%
Drive Automobile	38%	77%
Passenger in Automobile	74%	53%
Never travel to meet family/friends	25%	7%
Never travel to social activities	48%	24%
Never travel to religious activities	51%	31%
Never go shopping	15%	0%
Limit travel due to availability of transportation	39%	19%
Need more transportation than currently have	30%	9%

IX. POLICY IMPLICATIONS

This study of elders in Montgomery County aged 75 and over, combined with research literature, indicates that low income elders differ in significant ways from the general non-low income elderly population (5,8,10,14). The low income elder population is often neglected when it comes to public policy due to the general belief that it does not have significant unmet needs (13). The reality is that this population has significant unmet needs, and that in periods of economic decline they are disproportionately affected by cutbacks in services (13).

Size of Low Income Elderly Population

Approximately 16,800 individuals aged 75 and over have incomes less than 35 percent of the Montgomery County median income ($70,800). As outlined in Table 2, approximately one-third of all county residents age 75 and over have incomes under $25,000 per year, which places them at risk of inability to meet current or future financial commitments. From a policy standpoint, **it is our recommendation that the county take necessary steps to ensure that individuals are aware of, and have assistance in applying for, financial assistance programs for which they might be eligible**. For example, this study revealed that approximately 9 percent of the low income study participants who felt they needed Food Stamps but do not receive them. Given the income characteristics of this population, it is likely that a sizeable majority of these individuals would meet the eligibility criteria for this program.

Demographics

The low income elderly population is disproportionately female and living alone. While the study was limited by the lack of Hispanic and Asian participants, census projections indicate that ethnic and language minority populations are a significant portion of the county elderly population, and will rapidly increase in the coming decades. Health and Human Services data indicates that while Hispanics and Asians each comprise approximately 6 percent of the elderly population (9), they account for only 2 percent of those receiving in home aide services (IHAS) through the County.

It is our recommendation that the County expand outreach to ethnic and language minority communities to ensure that their needs are adequately addressed. Because of the great diversity of such communities, the unit costs to identify and serve these populations will be much higher. Consequently, there is a **need to explore alternative methods of communicating with and serving these communities**. One alternative service method used in other jurisdictions, that has effectively served ethnic and language minority populations, is "customer directed personal care services", which allow individuals to select their own personal care providers using County funds. Montgomery County Health and Human Services recently applied to the State for grant funding to initiate this type of program to better serve minority individuals.

Unmet Needs

The study found that the level of unmet need in the low income elderly population (63 percent of study participant's had one or more unmet need) is significantly higher than among non-low income elderly populations. Another important finding is that true unmet need is significantly higher than self-reported unmet need. For example, in this study only 2 percent of participants self-reported an unmet need for assistance with personal care, but 27 percent of individuals who reported significant difficulties in meeting their personal care needs due to physical limitations were not receiving any assistance. Consequently, **standard measures of unmet need derived from self-reported questionnaires should be treated with caution since they reflect significant underestimates of true unmet need**.

Studies have indicated that unmet needs and burdens on caregivers contribute to premature institutionalization (8). **Programs that address caregiver needs, along with enhanced outreach to identify and serve individuals with unmet needs, can contribute to reduction in premature institutionalization**.

Regression analysis indicates that after controlling for the influence of age, gender and race, mental health status is the most significant predictor of number of unmet needs. While it is impossible to determine causation from this study, **it is our recommendation that mental health services be enhanced among the elderly, since they are associated with higher levels of unmet need and greater risk of institutionalization**.

Housing

Low income elders were found to have lower rates of home ownership (51 percent compared to 75 percent of all county elders aged 75 and over). Among many elder individuals, and particularly among the low income elderly, homes represent the largest asset available to them. **It is our recommendation that the county provide responsible education and promotion about reverse mortgages that are structured to protect the interests of seniors as a significant way to address unmet needs resulting from limited financial resources**.

Transportation

Individuals in our county are increasingly dependent on transportation to accomplish their daily tasks of living. Studies indicate that increasing age is associated with fewer trips outside the home, more reliance on others and a higher level of unmet transportation need. **Transportation resources for the elderly can be improved by enhancing public and para transit and other transportation resources for the elderly, addressing concerns such as long wait times and safety that result in seniors not using public transportation, and making publicly funded programs and services available during daylight hours when many seniors are more comfortable driving**.

Prevention

With the large increase in the elderly population that is projected over the next several decades, it becomes increasingly important to identify programs and services that serve to prevent or delay impairments that result in dependence and institutionalization. Two broad areas that have been shown repeatedly to prevent dependence are the use of assistive devices and exercise. Exercise related initiatives for seniors have been launched in many jurisdictions, including a Robert Wood Johnson Foundation (RWJF) demonstration project, to explore the effectiveness of two different exercise related modalities for the elderly. The Maryland Department of Aging, with Montgomery County as a partner, is one of many agencies seeking to be part of this demonstration project. **It is our recommendation that, whether funded through RWJF or not, the County should implement an exercise initiative for seniors**.

Further Study

A major limitation of this study, the lack of Hispanic, Asian, and cognitively impaired participants, made it impossible to analyze whether the needs of these groups differ from those of whites and African-Americans. **Follow-up studies should focus on minority populations to determine their unique characteristics and needs**.

REFERENCES

1. *A Profile of Older Americans* (2000). US Department of Health and Human Services.

2. Aging in the 21st Century (2002). The Institute for Research on Women and Gender. Stanford University.

3. Dalaker, J. (1999). Poverty in the United States: 1998. Table 2. U.S. Census Bureau, Current Population Reports P60-207. Washington, DC: U.S. Government Printing Office.

4. Fillenbaum, G.G. (1988). Multidimensional Functional Assessment of Older Adults: The Duke Older Americans Resources and Services Procedures. Lawrence Erlbaum Associates, Hillsdale, NJ.

5. Gerson, L.W.; Jarjoura, D.G; McCord, G. (1987). Factors related to impaired mental health in urban elderly. Research on Aging, Vol 9(3), Sept 1987, 356-371.

6. *Health and Aging Chartbook, Health, United States, 1999*. US Department of Health and Human Services.

7. Howland, Jonathan; Lachman, Margie E; Peterson, Elizabeth W.; Cote, Jennifer; Kasten, Linda; Jette, Alan. (1998) Covariates of Fear of Falling and Associated Activity Curtailment. Gerontologist, Vol 38, No. 5, 549-555.

8. Kasper, J.D; Steinbach, U.; Andrews, J. (1994). Caregiver role appraisal and caregiver tasks as factors in ending caregiving. Journal of Aging and Health, Vol 6, No. 3, August 1994, 397-414.

9. Maryland - National Capital Park & Planning Commission, Research & Technology Center for Montgomery County, http://www.mc-mncppc.org/factmap/fact.htm

10. Needs Assessment of Senior Citizens in Montgomery County (2001). Center for Health Program Development and Management, University of Maryland, Baltimore County for Montgomery County Department of Health and Human Services.

11. Older Americans 2000: Key Indicators of Well-Being. Federal Interagency Forum on Aging Related Statistics. National Center for Health Statistics.

12. Resnick, Barbara (1999). Falls in a community of older adults. Clinical Nursing Research, August 1999, Vol. 8, Issue 3, 251-267.

13. Rittner, Barbara; Kirk, Alan B. (1995) Health Care and public transportation use by poor and frail elderly people, Social Work, May 1995, Vol. 40, Issue 3, 365-374.

14. Rowland, Diane; Lyons, Barbara (1996). Medicare, Medicaid, and the elderly poor. Health Care Financing Review, Winter 1996, Vol 18, Issue 2, 61-86.

15. Siegel, Jacob (1996). Aging into the 21st Century, National Aging Information Center.

16. Slivinski, L.R.; Fitch, V.L.; Mosca, J. (1994) Predicting health and social service utilization of older adults. Journal of Social Service Research, Vol 20(1/2), 21-40, 1994.

17. Status of Seniors in Howard County and the Aging in Place Initiative (2001). REDA International Inc for Howard County, Maryland, Office on Aging.

18. Straight, Audrey (1996). Community Transportation Survey. Public Policy Institution, American Association of Retired Persons (AARP).

19. United State Census (2000), http://www.census.gov/

20. Weissert, W.G,; Miller, E.A. (2000). Predicting Elderly People's Risk for Nursing Home Placement, Hospitalization, Functional Impairment, and Mortality: A Synthesis. Medical Care Research and Review, Vol. 57, No. 3, (September), p. 259-297.